SERVICE MANUAL

DVD-VCR

MODEL : DVD-VCR 4350
(VC8505P1K)

universum.

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SECTION 1

SUMMARY

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PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY, NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

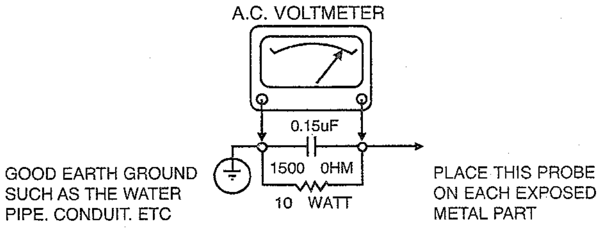
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

SAFETY CHECKS

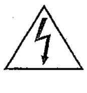
AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED. A CHECK SHOULD BE MADE OF THE FOLLOWING.

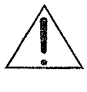
SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD). AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUNING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150.V A.C TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.



SUBJECT: GRAPHIC SYMBOLS


THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.


THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SUBJECT : X-RADIATION

1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RAYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND, UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
2. ONLY FACTORY SPECIFIED C.R.T. ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS X-RAY SHIELD IN COLOR SETS, ALWAYS RE-INSTALL THEM.
3. IT IS ESSNTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRATION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD, SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED. THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY, WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE. AND THAT THE HIGH VOLTAGE READING BE RECORDER ON EACH CUSTOMER'S INVOICE.
5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE, AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY. DO NOT OPERATE THE PRODUCT LONGER THAN IS NECESSARY TO LOCATE THE CAUSE OF EXCESSIVE VOLTAGE.
6. REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS (WHERE USED).

SUBJECT: IMPLOSION

1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTEGRAL IMPLOSION PROTECTION SYSTEM, BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION, AVOID SCRATCHING THE TUBE. IF SCRATCHED REPLACE IT.
2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PALCEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT. MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the VCR+DVD covered by this service data and its supplements and addends, read and follow the SAFETY PRECAUTIONS. NOTE : if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publications, always follow the safety precautions.
Remembers Safety First:

General Servicing Precautions

1. Always unplug the VCR+DVD AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnection or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this VCR+DVD or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with whitch instruments covered by this service manual might be equipped.

5. Do not apply AC power to this VCR+DVD and/or any of its electrical assemblies unless all solid-state device heat sinks are cerrectly installed.

6. Always connect test instrument ground lead to the appropriate ground before connection the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.
Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor chip components.
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grouned-tip soldering iron to solder or unsolder ES devices.

4. Use only an anti-static solder removal device. Some solder removal devices not classified a "anti-static" can generate electrical charges sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

SERVICE INFORMATION FOR EEPROM IC SETTING

EEPROM option code No. setting

```
NAME     HEX     BINARY
OPT1     00      00000000
OPT2     00      00000000
OPT3     00      00000000
OPT4     00      00000000
OPT5     00      00000000

WR : OK   I : EXIT   MOVE : ◀ ▶
EDIT : ▲▼

MASKROM : R00
EEPROM : R13          LG CODE
C/SUM : OF
```

```
MODEL            NAME    HEX    BINARY

DVD-VCR 4350     OPT1    F4     00000000
                 OPT2    C3     00000000
                 OPT3    58     00000000
                 OPT4    01     00000000
                 OPT5    00     00000000

WR : OK   I : EXIT   MOVE : ◀ ▶
EDIT : ▲▼
```

EEPROM option code No. setting procedure

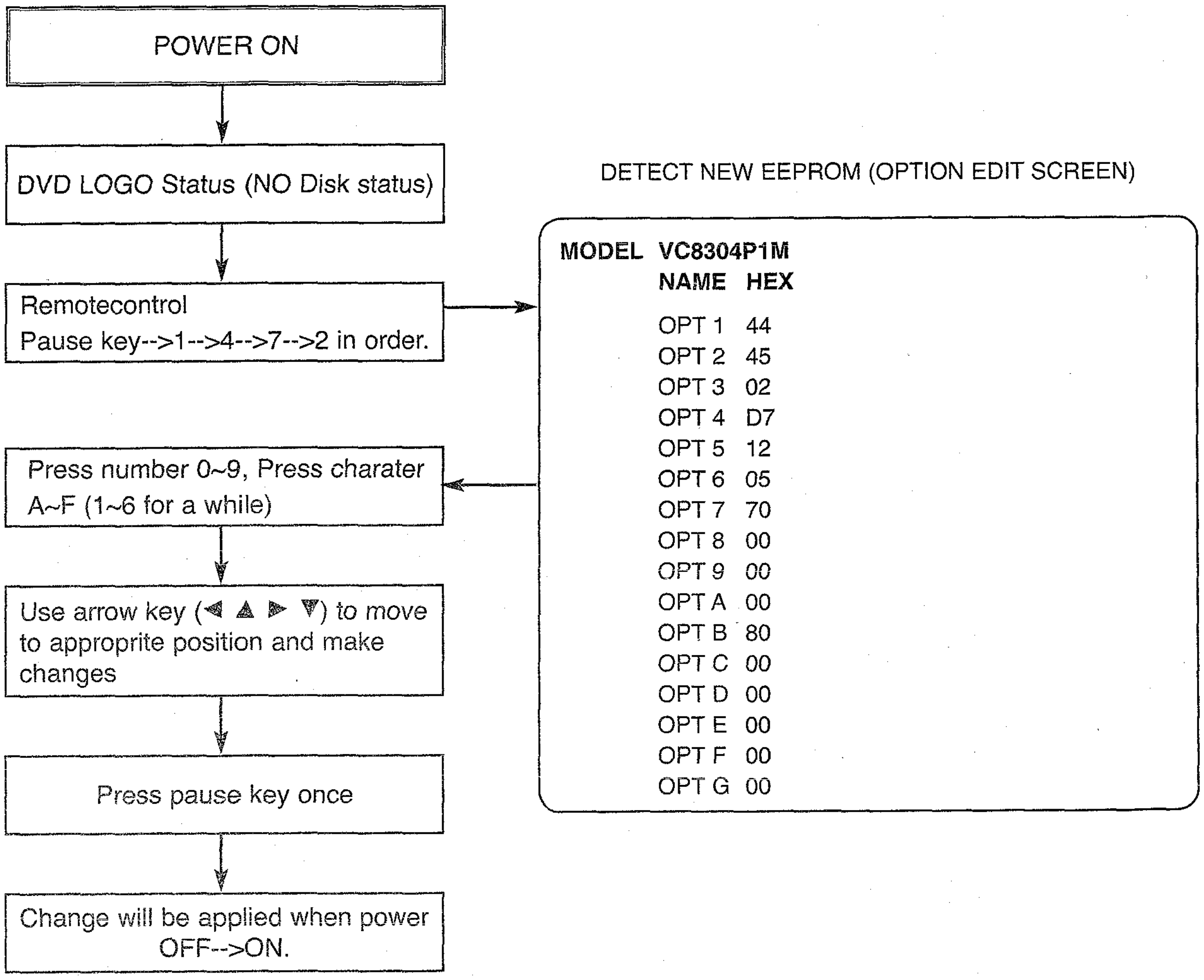
1. DETECT NEW EEPROM (OPTION EDIT SCREEN)
   - Eeprom EDIT screen automatically appears if replacing Eeprom.
   - Setup option data using the cursor Up/Down key of a remote control.
     (Setup upon BOM depending on OPT1~OPT5 model)
   - Since an initial remote control is set to LG for LG model, appropriately set optiona data using the cursor Up/Down key.

2. EEPROM WRITED COMPLETE SCREEN
   - Writes data on EEPROM by using REMOCON "OK".
   - If completing the option data screen with a menu key, Powering Off is automatically done and the option edit screen is arranged.

3. PG ADJUST
   1) Payback the SP standard tape
   2) Press the “1” key on the Remote controller and the “PLAY” key on the Front Panel the same time, then it goes in to Tracking initial mode.
   3) Repeat the above step(No.2), then it finishes the PG adjusting automatically.
   4) Stop the playback, then it goes out to PG adjusting mode after mony the PG data.

4. EEPROM INITIAL
   - SETUP is displayed in the field if pressing the FRONT REC KEY with the remocon number "CLEAR" key pressed in the status of powering Off.
   - AUTO SEARCH is done since the initial screen of ACMS is serviced if powering On.
   - Check basic operation (PLAY/RECORD...)

SERVICE INFORMATION FOR EEPROM (DVD)



POWER ON

DVD LOGO Status (NO Disk status)

Remotecontrol
Pause key-->1-->4-->7-->2 in order.

Press number 0~9, Press charater A~F (1~6 for a while)

Use arrow key (◀ ▲ ▶ ▼) to move to appropri te position and make changes

Press pause key once

Change will be applied when power OFF-->ON.

DETECT NEW EEPROM (OPTION EDIT SCREEN)

MODEL VC8304P1M

NAME	HEX
OPT 1	44
OPT 2	45
OPT 3	02
OPT 4	D7
OPT 5	12
OPT 6	05
OPT 7	70
OPT 8	00
OPT 9	00
OPT A	00
OPT B	80
OPT C	00
OPT D	00
OPT E	00
OPT F	00
OPT G	00

*** OPTION**

- NTSC model doesn't have VCR option and use DVD option B~F as VCR option. (only DVD exist)
- PAL model has another separate VCR option. (Both VCR and DVD exist)

SPECIFICATIONS

DVD PART

Power supply	AC 200~240V, 50 Hz
Power consumtion	19W
Mass	5.4kg
External dimensions	430 x 97.5 x 360 (W x H x D)
Signal system.	PAL 625/50, NTSC 525/60
Laser	Semiconductor laser, wavelength 650nm
Frequency range (digital audio)	4 Hz to 20 kHz
Signal-to-noise ratio (digital audio)	More than 100 dB (EIAJ)
Audio dynamic range (digital audio)	More than 100 dB (EIAJ)
Harmonic distortion(digital audio)	0.008%
Wow and flutter	Below measurable level (less than +0.001%(W.PEAK)) (EIAJ)
Operations	Temperature : 5°C(41°F) to 35°C(95°F), Operation status : Horizontal

OUTPUTS

Video outputs	1.0V(p-p), 75Ω, negative sync., RCA jack x 1/SCART(TO TV)
S video outputs	(Y)1.0V(p-p), 75Ω, negative sync.,Mini DIN 4-pin x 1 (C)0.3V(p-p), 75Ω
Component video output	(Y) 1.0 V (p-p), 75 Ω, negative sync., RCA jack x 1 (Pb)/(Pr) 0.7 V (p-p), 75 Ω
Audio output(digital audio)	0.5V(p-p), 75Ω, RCA jack X 1/SCART(TO TV)
Audio output(optical audio)	Optical connector x 1
Audio output(analog audio)	2.0Vrms (1kHz, 0dB), 330Ω, RCA jack (L, R) x 1/ SCART(TO TV)

VHS PART

Video Head System	Double azimuth 4 heads, helical scanning
Tape format	Tape width 12.7 mm (0.5 inch)
Timer	24 hours display type

*Designs and specifications are subject to change without notice.
*Weight and dimensions shown are approximate.

SECTION 2

CABINET & MAIN CHASSIS

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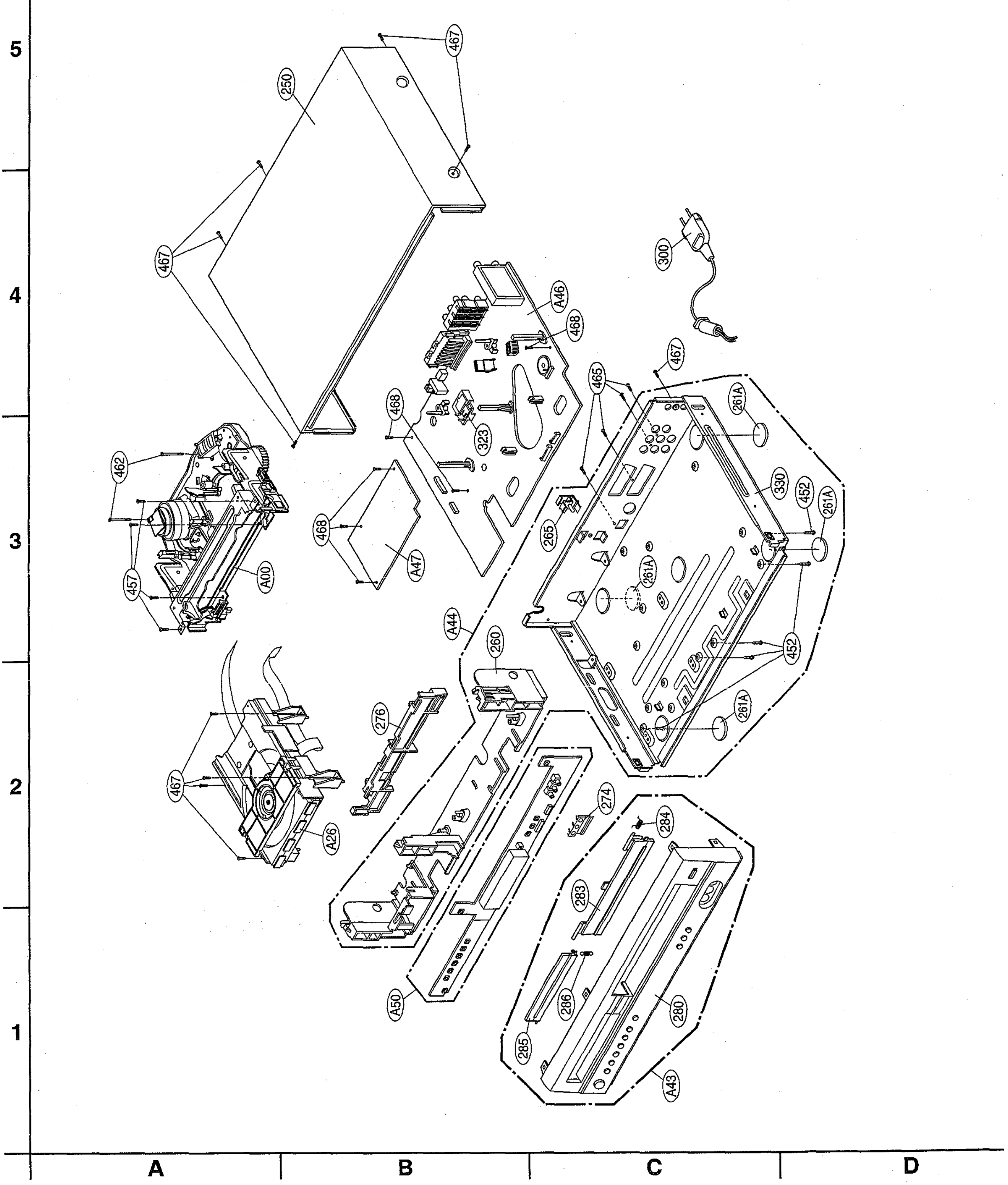
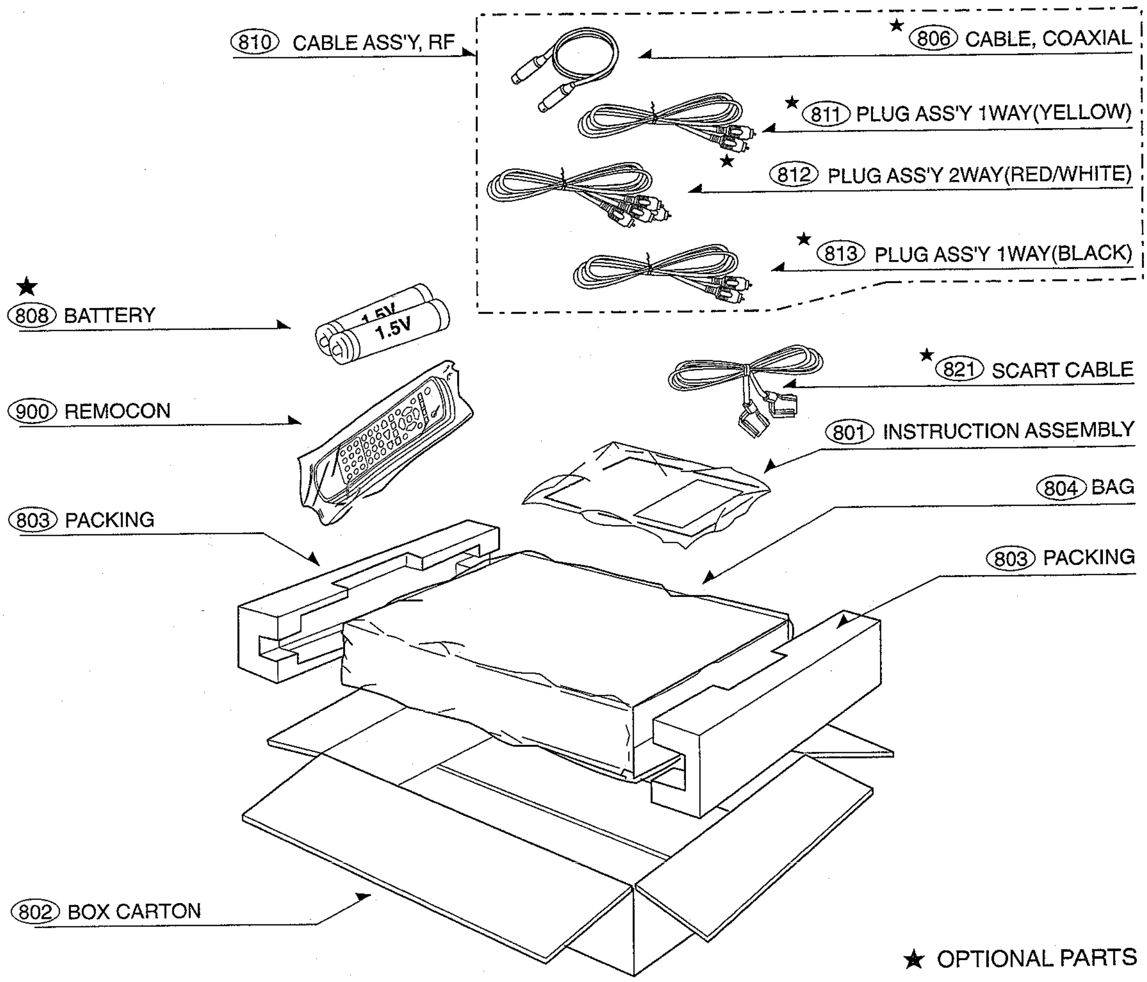
EXPLODED VIEWS

1. Cabinet and Main Frame Section



5
4
3
2
1
467
250
467
300
A46
468
467
465
261A
468
323
462
330
452
261A
265
468
457
A47
A00
261A
A44
260
452
276
261A
274
284
467
A26
283
286
A50
280
285
A43
A
B
C
D

2. Packing Accessory Section



810 CABLE ASS'Y, RF
★ 806 CABLE, COAXIAL
★ 811 PLUG ASS'Y 1WAY(YELLOW)
★ 812 PLUG ASS'Y 2WAY(RED/WHITE)
★ 813 PLUG ASS'Y 1WAY(BLACK)
★ 808 BATTERY
1.5V
1.5V
★ 821 SCART CABLE
900 REMOCON
801 INSTRUCTION ASSEMBLY
804 BAG
803 PACKING
803 PACKING
802 BOX CARTON
★ OPTIONAL PARTS

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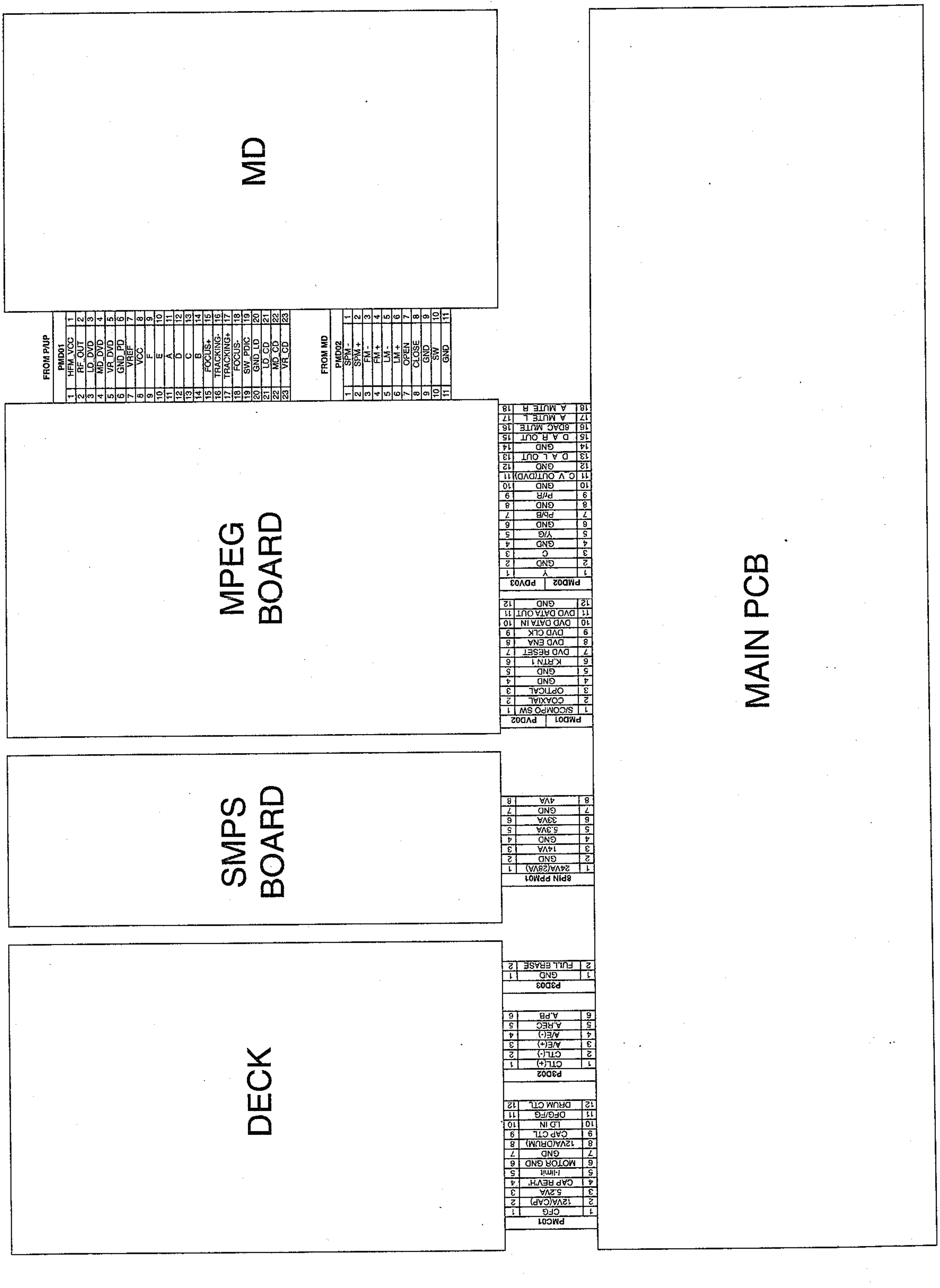
OVERALL WIRING DIAGRAM


MD
MPEG BOARD
SMPS BOARD
DECK
MAIN PCB
FROM P/UP
PMD01
HFM_VCC
RF_OUT
LD_DVD
MD_DVD
VR_DVD
GND_PD
VREF
VCC
F
E
A
D
C
B
FOCUS+
TRACKING-
TRACKING+
FOCUS-
SW_PDIC
GND_LD
LD_CD
MD_CD
VR_CD
FROM MD
PMD02
SPM -
SPM +
FM -
FM +
LM -
LM +
OPEN
CLOSE
GND
SW
GND
PMD02
PDV03
Y
GND
C
GND
Y/G
GND
Pb/B
GND
Pr/R
GND
C V OUT(DVD)
GND
D A L OUT
GND
D A R OUT
8DAC MUTE
A MUTE L
A MUTE R
PMD01
PDV02
S/CON/PO SW
COAXIAL
OPTICAL
GND
GND
K-RTN 1
DVD RESET
DVD ENA
DVD CLK
DVD DATA IN
DVD DATA OUT
GND
8PIN PPM01
24VA(28VA)
GND
14VA
GND
5.3VA
33VA
GND
4VA
PSD03
GND
FULL ERASE
PSD02
CTL(+)
CTL(-)
A/E(+)
A/E(-)
A.REC
A.PB
PMC01
CFG
12VA(CAP)
5.2VA
CAP REV/F
I-limit
MOTOR GND
GND
12VA(DRUM)
CAP CTL
LD IN
DFG/FG
DRUM CTL

VCR PART
ELECTRICAL ADJUSTMENT PROCEDURES

1. Servo Adjustment

1) PG Adjustment

- Test Equipment

a) OSCILLOSCOPE
b) NTSC MODEL : NTSC SP TEST TAPE
C) PAL MODEL : PAL SP TEST TAPE

- Adjustment And Specification

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(TP)	R/C TRK JIG KEY	6.5 ± 0.5H

- **Adjustment Procedure**

a) Insert the SP Test Tape and play.
Note - Adjust the distance of X, pressing the Tracking(+) or Tracking(-) when the "ATR" is blink after the SP Test Tape is inserted.

b) Connect the CH1 of the oscilloscope to the H/SW(TP) and CH2 to the Video Out for the VCR.

c) Trigger the mixed Combo Video Signal of CH2 to the CH1 H/SW(TP), and then check the distance (time difference), which is from the selected A(B) Head point of the H/SW(TP) signal to the starting point of the vertical synchronized signal, to 6.5H ± 0.5H (412μs, 1H=63μs).

- **PG Adjustment Method**

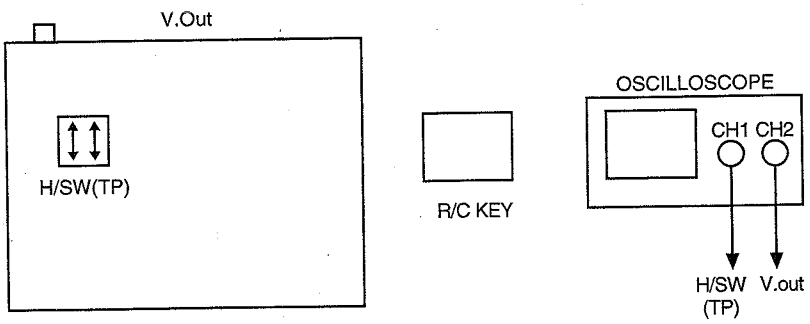
a-1) Payback the SP standard tape

b-2) Press the "1" key on the Remote controller and the "PLAY" key on the Front Panel the same time, then it goes in to Tracking initial mode.

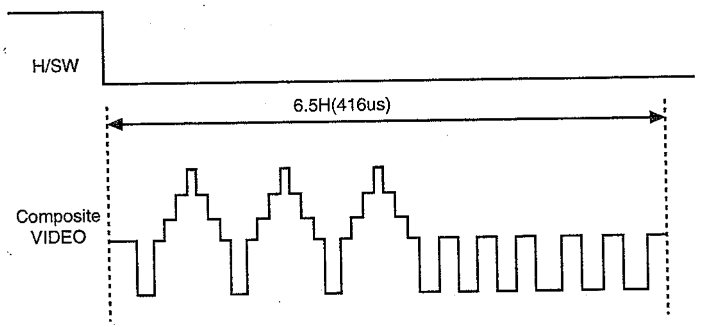
c-3) Repeat the above step(No.b-2), then it finishes the PG adjusting automatically.

d-4) Stop the playback, then it goes out to PG adjusting mode after mony the PG data.

- **CONNECTION**

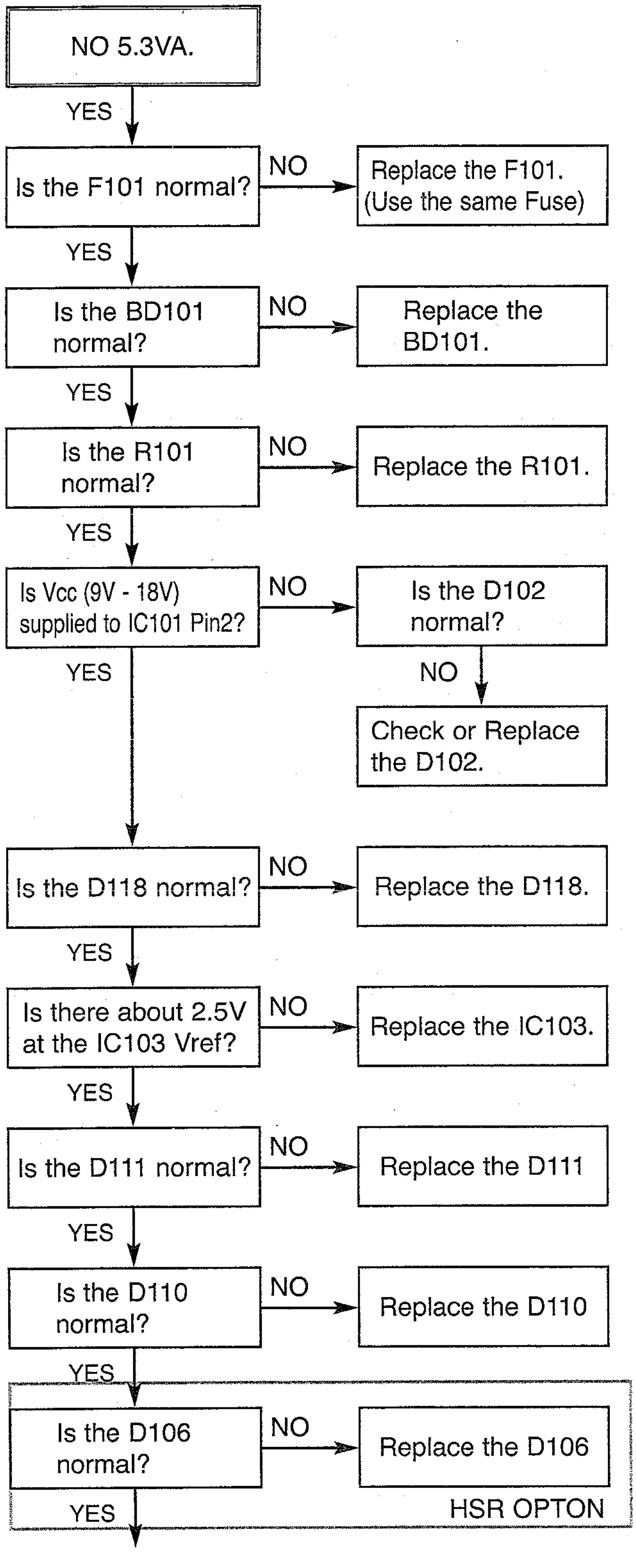


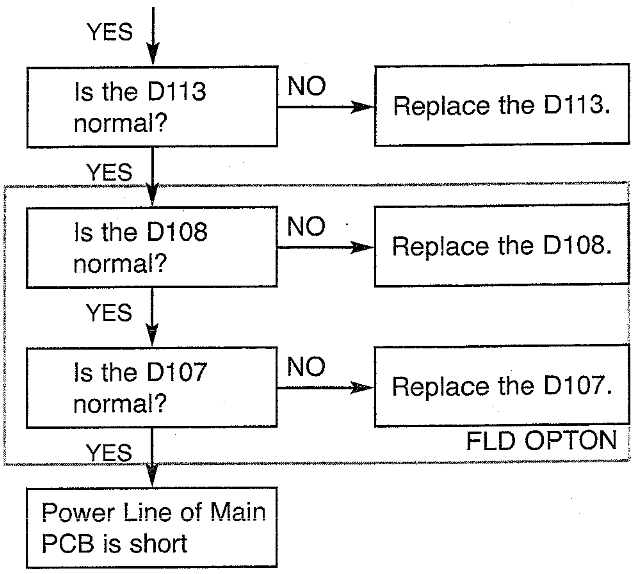
- **WAVEFORM**

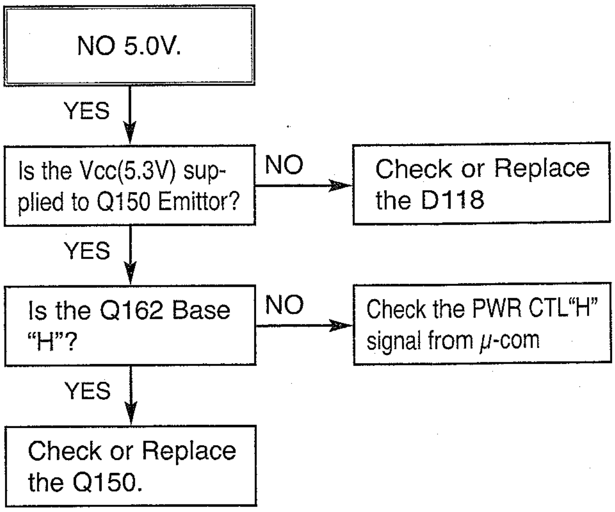


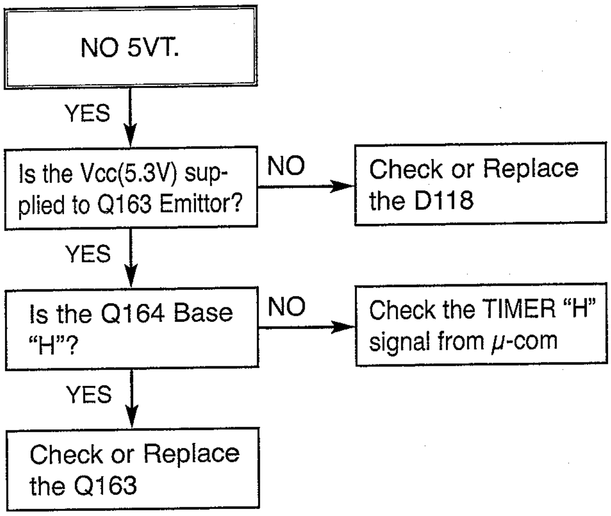
ELECTRICAL TROUBLESHOOTING GUIDE

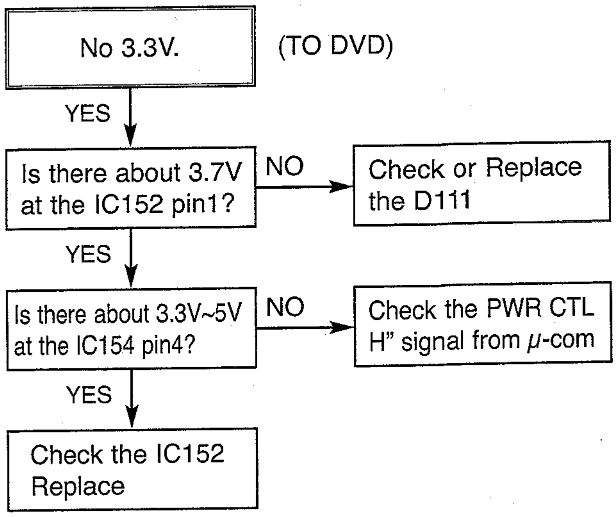
1. Power(SMPS) CIRCUIT

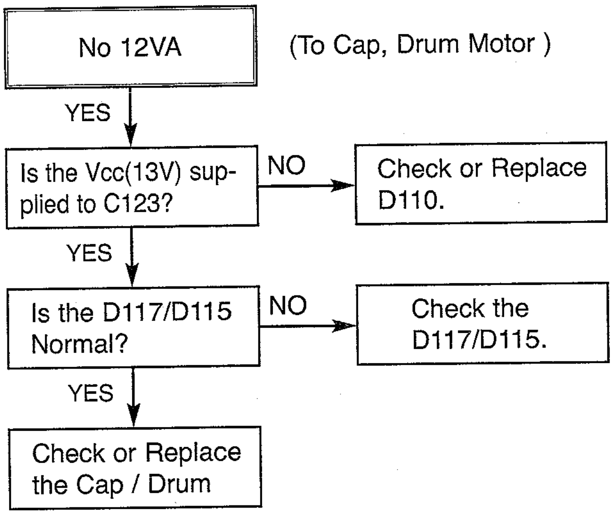

NO 5.3VA.
YES
Is the F101 normal?
NO
Replace the F101. (Use the same Fuse)
YES
Is the BD101 normal?
NO
Replace the BD101.
YES
Is the R101 normal?
NO
Replace the R101.
YES
Is Vcc (9V - 18V) supplied to IC101 Pin2?
NO
Is the D102 normal?
NO
Check or Replace the D102.
YES
Is the D118 normal?
NO
Replace the D118.
YES
Is there about 2.5V at the IC103 Vref?
NO
Replace the IC103.
YES
Is the D111 normal?
NO
Replace the D111
YES
Is the D110 normal?
NO
Replace the D110
YES
Is the D106 normal?
NO
Replace the D106
YES
HSR OPTON

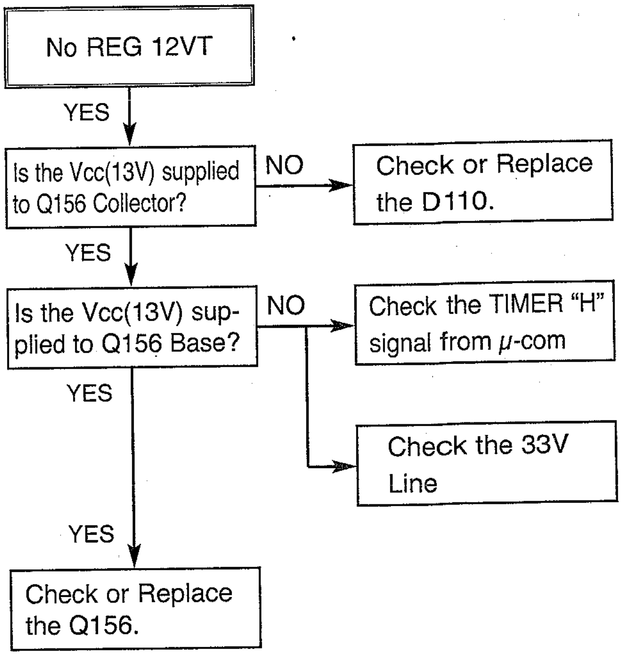

YES
Is the D113 normal?
NO
Replace the D113.
YES
Is the D108 normal?
NO
Replace the D108.
YES
Is the D107 normal?
NO
Replace the D107.
YES
FLD OPTON
Power Line of Main PCB is short

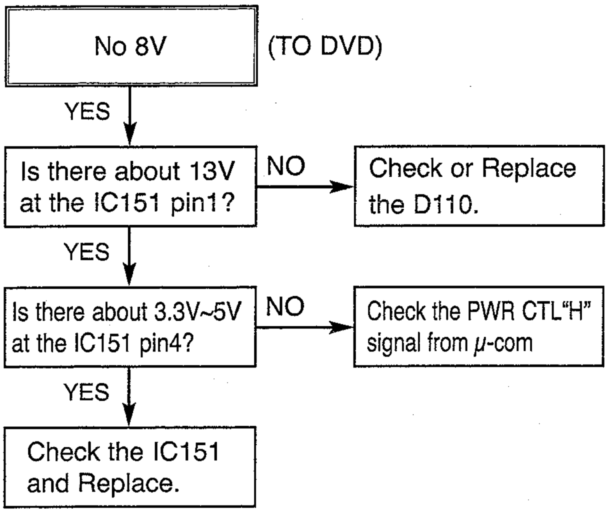

NO 5.0V.
YES
Is the Vcc(5.3V) supplied to Q150 Emittor?
NO
Check or Replace the D118
YES
Is the Q162 Base "H"?
NO
Check the PWR CTL"H" signal from μ-com
YES
Check or Replace the Q150.

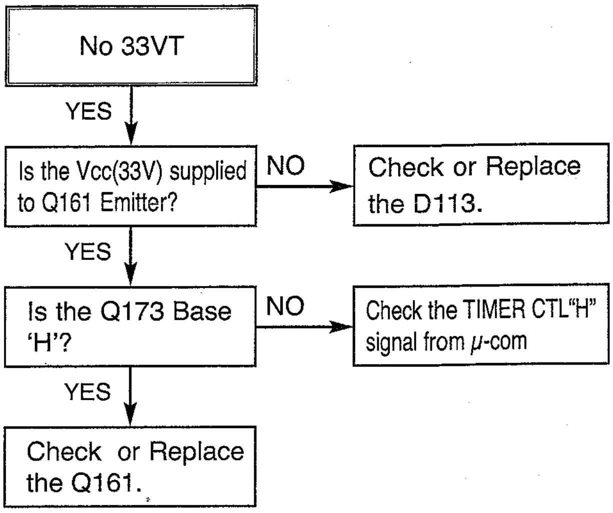

NO 5VT.
YES
Is the Vcc(5.3V) supplied to Q163 Emittor?
NO
Check or Replace the D118
YES
Is the Q164 Base "H"?
NO
Check the TIMER "H" signal from µ-com
YES
Check or Replace the Q163

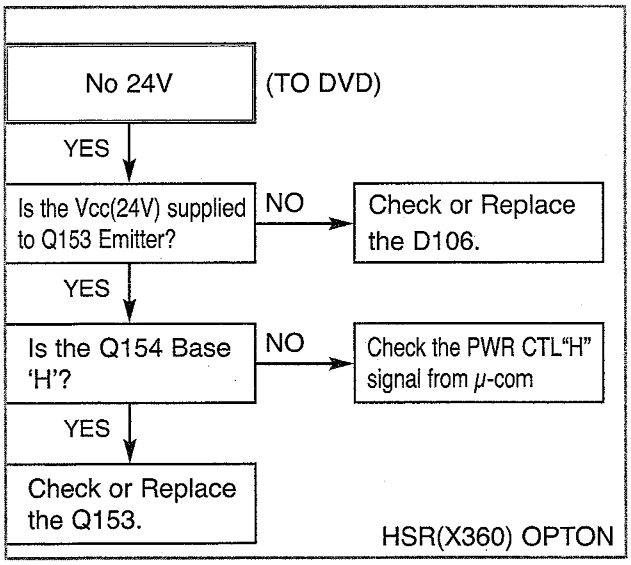

No 3.3V.
(TO DVD)
YES
Is there about 3.7V at the IC152 pin1?
NO
Check or Replace the D111
YES
Is there about 3.3V~5V at the IC154 pin4?
NO
Check the PWR CTL H" signal from µ-com
YES
Check the IC152 Replace


No 12VA
(To Cap, Drum Motor)
YES
Is the Vcc(13V) supplied to C123?
NO
Check or Replace D110.
YES
Is the D117/D115 Normal?
NO
Check the D117/D115.
YES
Check or Replace the Cap / Drum


No REG 12VT
YES
Is the Vcc(13V) supplied to Q156 Collector?
NO
Check or Replace the D110.
YES
Is the Vcc(13V) supplied to Q156 Base?
NO
Check the TIMER "H" signal from µ-com
Check the 33V Line
YES
YES
Check or Replace the Q156.

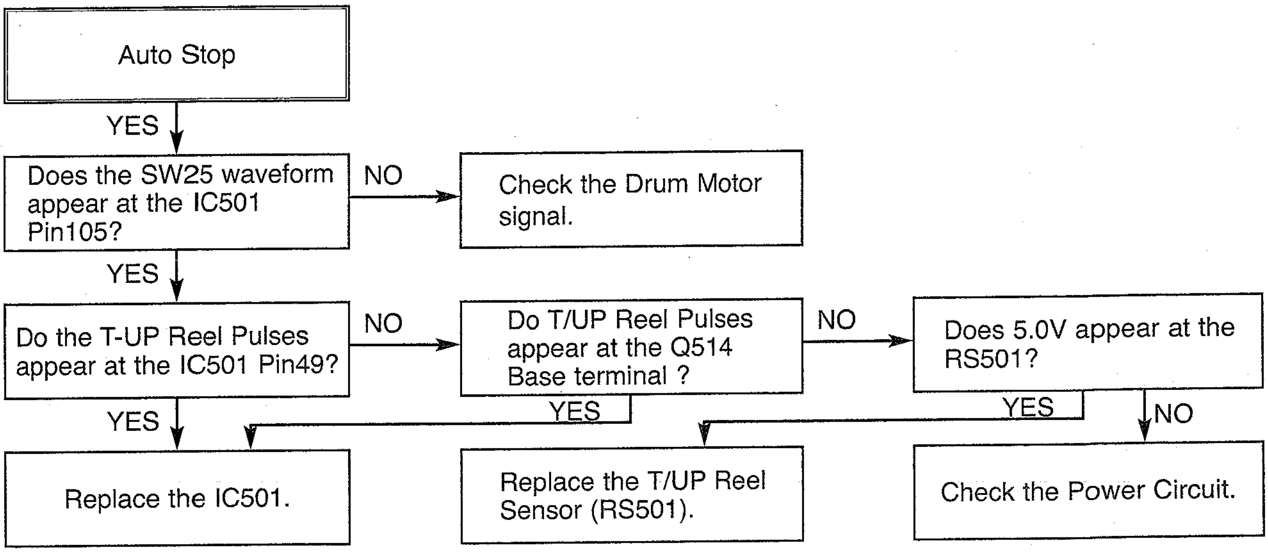

No 8V
(TO DVD)
YES
Is there about 13V at the IC151 pin1?
NO
Check or Replace the D110.
YES
Is there about 3.3V~5V at the IC151 pin4?
NO
Check the PWR CTL"H" signal from μ-com
YES
Check the IC151 and Replace.


No 33VT
YES
Is the Vcc(33V) supplied to Q161 Emitter?
NO
Check or Replace the D113.
YES
Is the Q173 Base 'H'?
NO
Check the TIMER CTL"H" signal from μ-com
YES
Check or Replace the Q161.

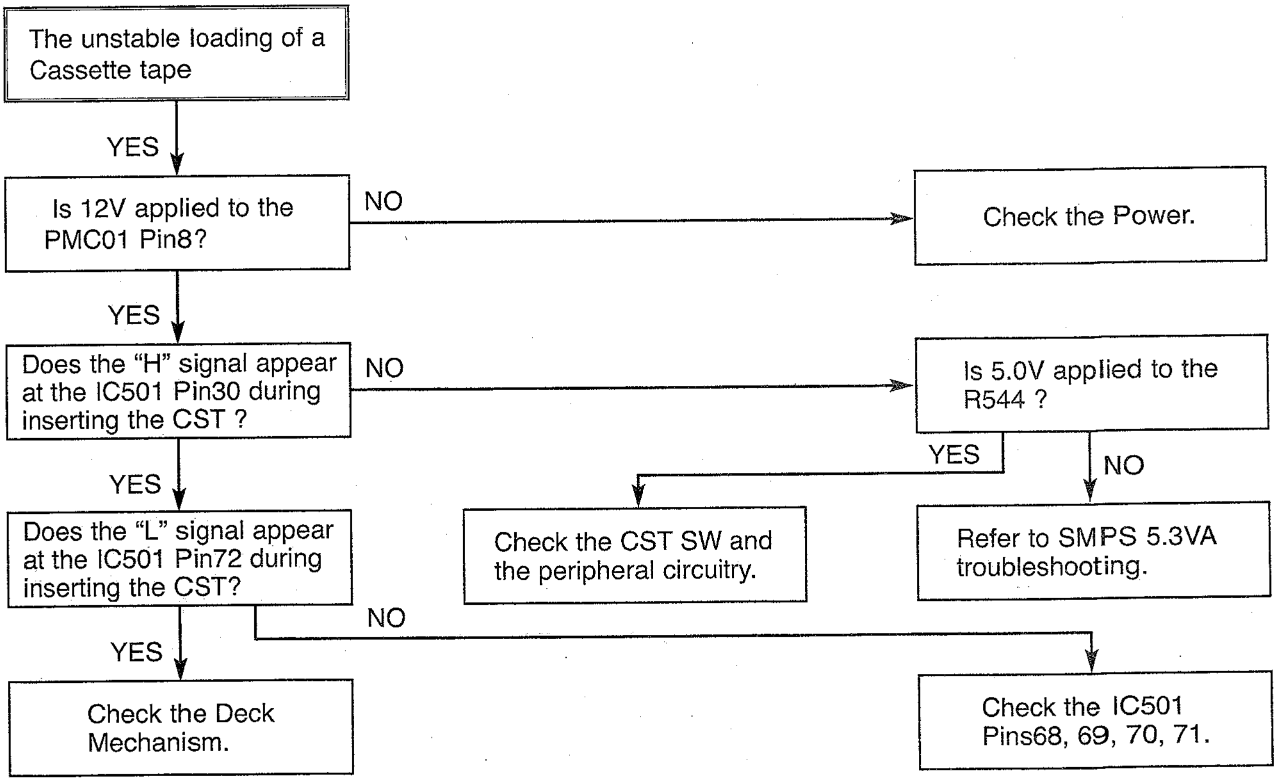

No 24V
(TO DVD)
YES
Is the Vcc(24V) supplied to Q153 Emitter?
NO
Check or Replace the D106.
YES
Is the Q154 Base 'H'?
NO
Check the PWR CTL"H" signal from μ-com
YES
Check or Replace the Q153.
HSR(X360) OPTON

2. SYSTEM/KEY CIRCUIT

(1) AUTO STOP


Auto Stop
YES
Does the SW25 waveform appear at the IC501 Pin105?
NO
Check the Drum Motor signal.
YES
Do the T-UP Reel Pulses appear at the IC501 Pin49?
NO
Do T/UP Reel Pulses appear at the Q514 Base terminal ?
NO
Does 5.0V appear at the RS501?
YES
YES
YES
NO
Replace the IC501.
Replace the T/UP Reel Sensor (RS501).
Check the Power Circuit.

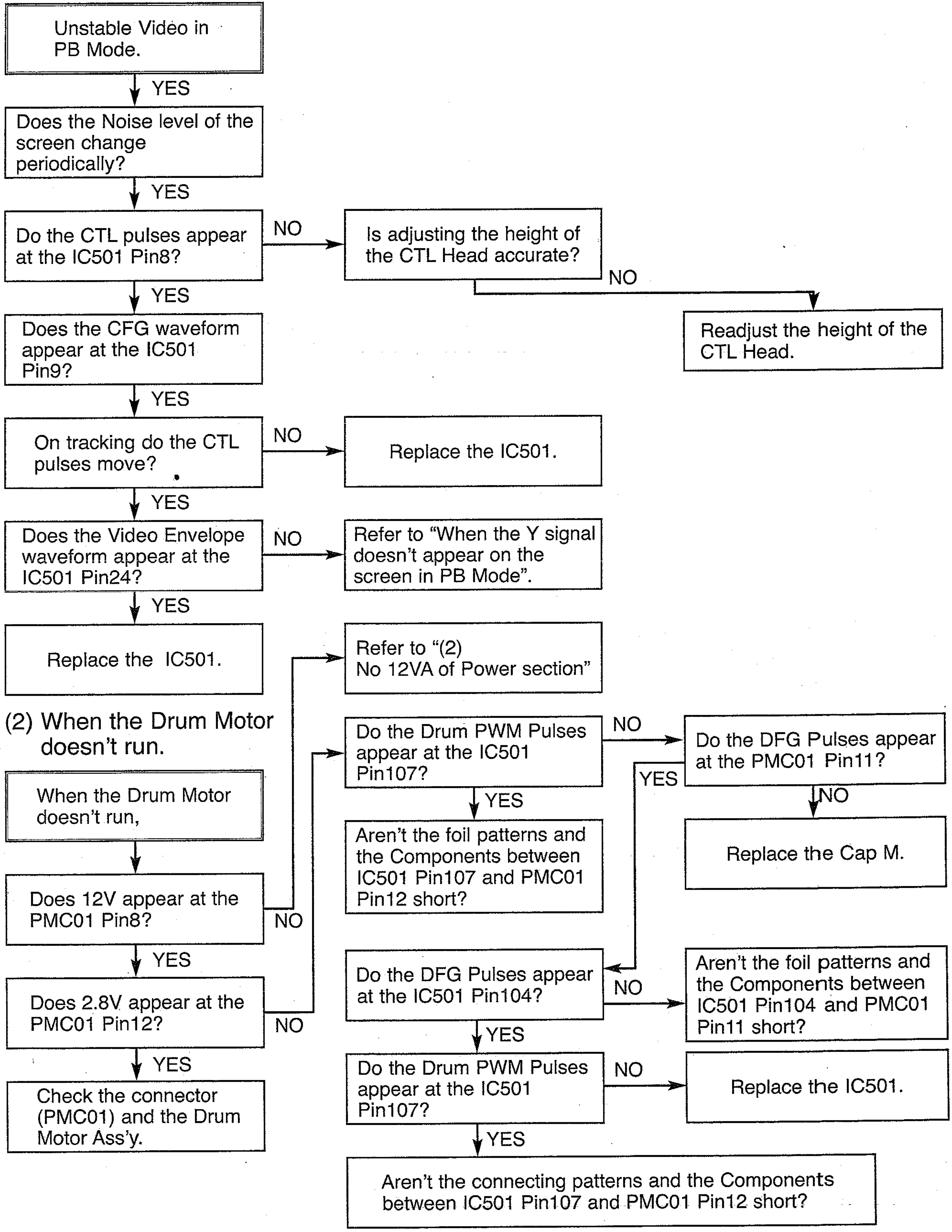
(2) The unstable loading of a Cassette tape


The unstable loading of a Cassette tape
YES
Is 12V applied to the PMC01 Pin8?
NO
Check the Power.
YES
Does the "H" signal appear at the IC501 Pin30 during inserting the CST ?
NO
Is 5.0V applied to the R544 ?
YES
YES
NO
Does the "L" signal appear at the IC501 Pin72 during inserting the CST?
Check the CST SW and the peripheral circuitry.
Refer to SMPS 5.3VA troubleshooting.
NO
YES
Check the Deck Mechanism.
Check the IC501 Pins68, 69, 70, 71.

Caution : Auto stop can occur because Grease or Oil is dried up

3. SERVO CIRCUIT

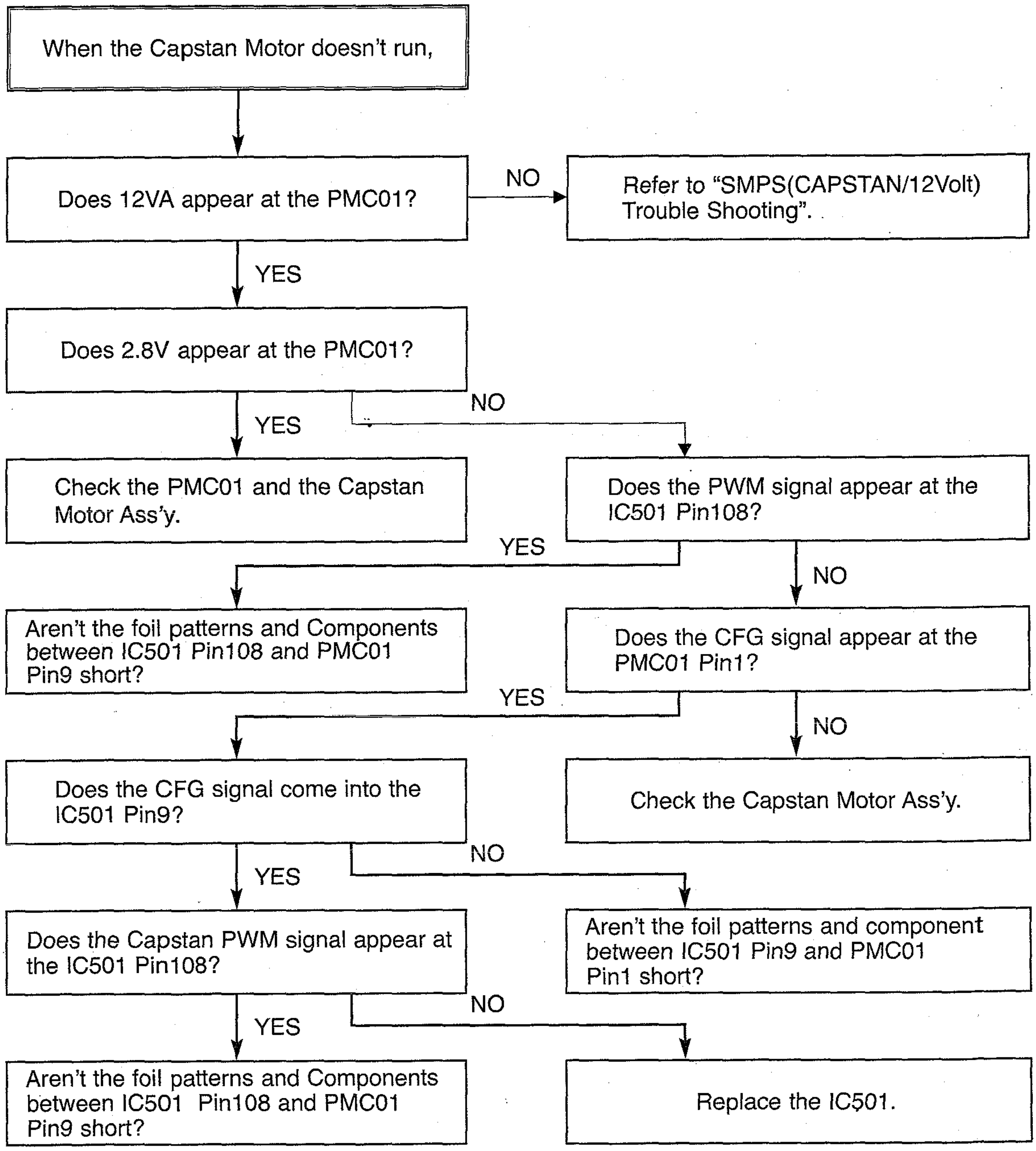
(1) Unstable Video in PB MODE


Unstable Video in PB Mode.
YES
Does the Noise level of the screen change periodically?
YES
Do the CTL pulses appear at the IC501 Pin8?
NO
Is adjusting the height of the CTL Head accurate?
NO
Readjust the height of the CTL Head.
YES
Does the CFG waveform appear at the IC501 Pin9?
YES
On tracking do the CTL pulses move?
NO
Replace the IC501.
YES
Does the Video Envelope waveform appear at the IC501 Pin24?
NO
Refer to "When the Y signal doesn't appear on the screen in PB Mode".
YES
Replace the IC501.

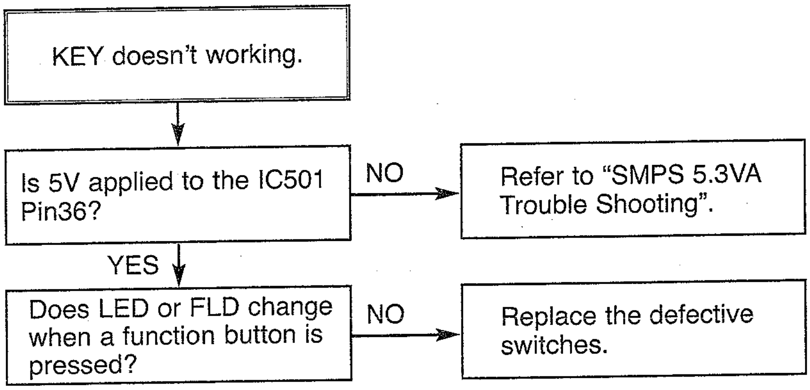
(2) When the Drum Motor doesn't run.

When the Drum Motor doesn't run,
Does 12V appear at the PMC01 Pin8?
NO
Refer to "(2) No 12VA of Power section"
YES
Does 2.8V appear at the PMC01 Pin12?
NO
Do the Drum PWM Pulses appear at the IC501 Pin107?
YES
Aren't the foil patterns and the Components between IC501 Pin107 and PMC01 Pin12 short?
NO
Do the DFG Pulses appear at the PMC01 Pin11?
NO
Replace the Cap M.
YES
Do the DFG Pulses appear at the IC501 Pin104?
NO
Aren't the foil patterns and the Components between IC501 Pin104 and PMC01 Pin11 short?
YES
Do the Drum PWM Pulses appear at the IC501 Pin107?
NO
Replace the IC501.
YES
Aren't the connecting patterns and the Components between IC501 Pin107 and PMC01 Pin12 short?
YES
Check the connector (PMC01) and the Drum Motor Ass'y.

(3) When the Capstan Motor doesn't run,

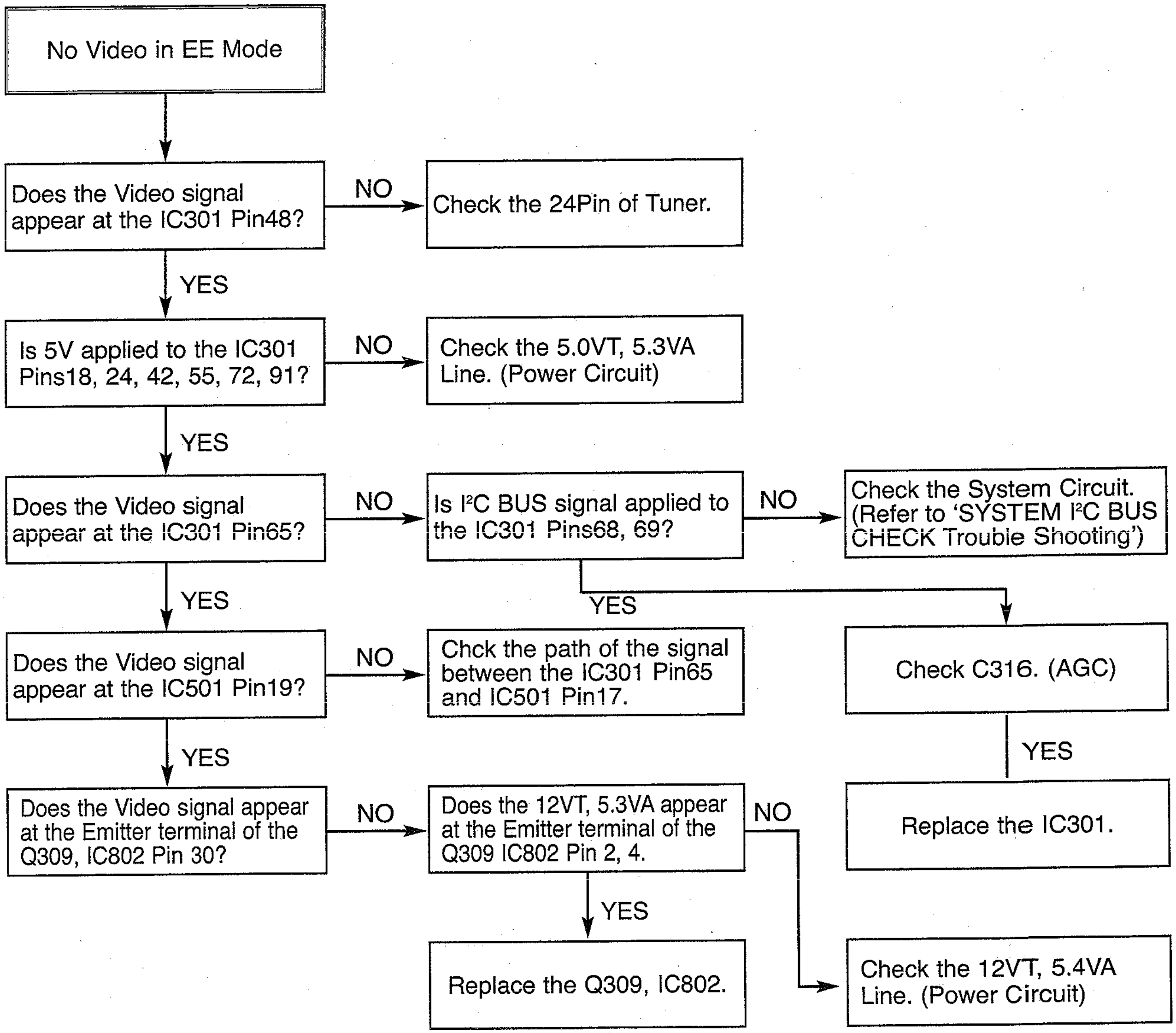

When the Capstan Motor doesn't run,
Does 12VA appear at the PMC01?
NO
Refer to "SMPS(CAPSTAN/12Volt) Trouble Shooting".
YES
Does 2.8V appear at the PMC01?
YES
NO
Check the PMC01 and the Capstan Motor Ass'y.
Does the PWM signal appear at the IC501 Pin108?
YES
NO
Aren't the foil patterns and Components between IC501 Pin108 and PMC01 Pin9 short?
Does the CFG signal appear at the PMC01 Pin1?
YES
NO
Does the CFG signal come into the IC501 Pin9?
Check the Capstan Motor Ass'y.
NO
YES
Does the Capstan PWM signal appear at the IC501 Pin108?
Aren't the foil patterns and component between IC501 Pin9 and PMC01 Pin1 short?
NO
YES
Aren't the foil patterns and Components between IC501 Pin108 and PMC01 Pin9 short?
Replace the IC501.

(4) KEY doesn't working

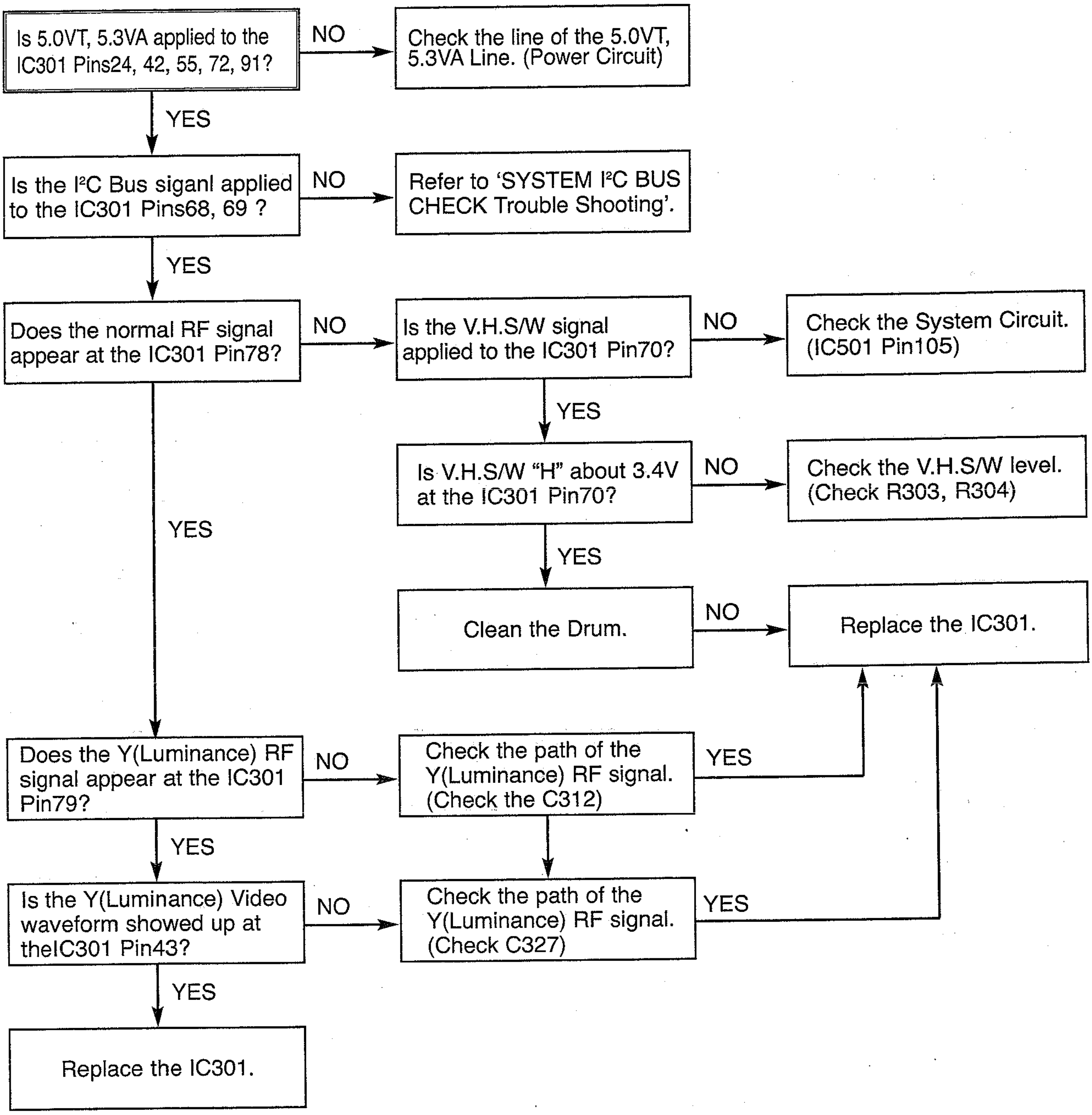

KEY doesn't working.
Is 5V applied to the IC501 Pin36?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Does LED or FLD change when a function button is pressed?
NO
Replace the defective switches.

4. Y/C CIRCUIT

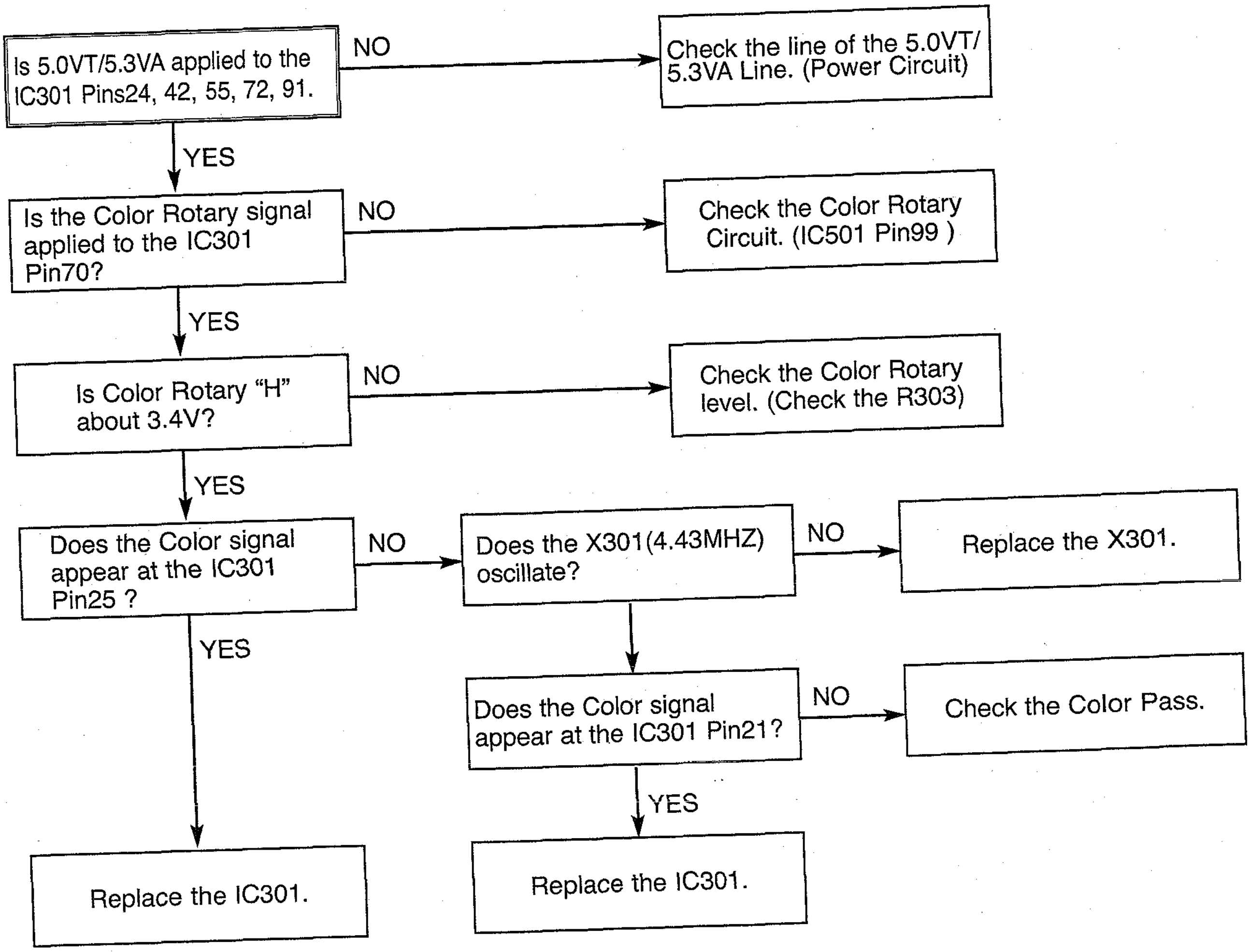
(1) No Video in EE Mode,


No Video in EE Mode
Does the Video signal appear at the IC301 Pin48?
NO
Check the 24Pin of Tuner.
YES
Is 5V applied to the IC301 Pins18, 24, 42, 55, 72, 91?
NO
Check the 5.0VT, 5.3VA Line. (Power Circuit)
YES
Does the Video signal appear at the IC301 Pin65?
NO
Is I²C BUS signal applied to the IC301 Pins68, 69?
NO
Check the System Circuit. (Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting')
YES
Check C316. (AGC)
YES
Replace the IC301.
YES
Does the Video signal appear at the IC501 Pin19?
NO
Chck the path of the signal between the IC301 Pin65 and IC501 Pin17.
YES
Does the Video signal appear at the Emitter terminal of the Q309, IC802 Pin 30?
NO
Does the 12VT, 5.3VA appear at the Emitter terminal of the Q309 IC802 Pin 2, 4.
YES
Replace the Q309, IC802.
NO
Check the 12VT, 5.4VA Line. (Power Circuit)

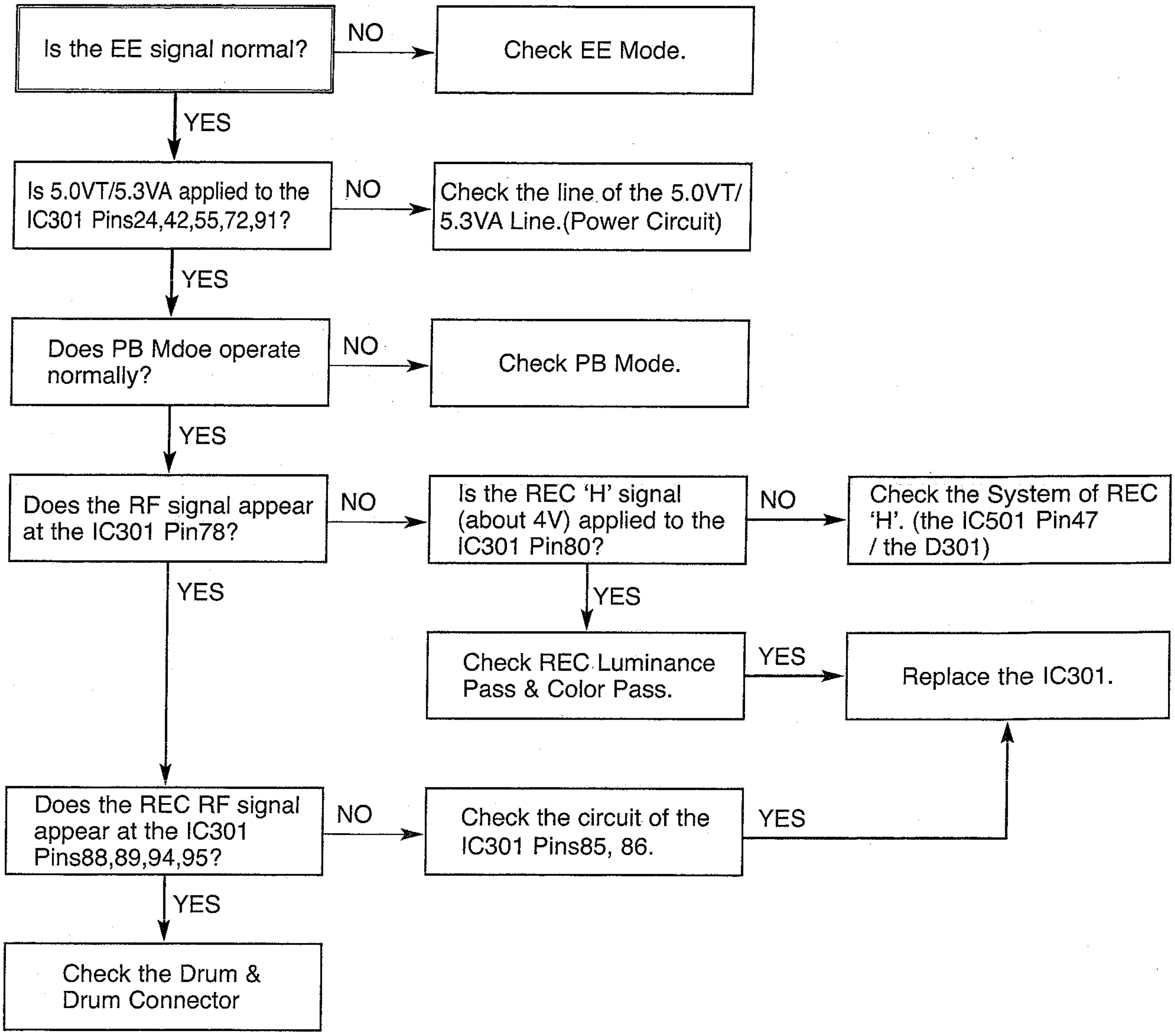
(2) When the Y(Luminance) signal doesn't appear on the screen in PB Mode,


Is 5.0VT, 5.3VA applied to the IC301 Pins24, 42, 55, 72, 91?
NO
Check the line of the 5.0VT, 5.3VA Line. (Power Circuit)
YES
Is the I²C Bus siganl applied to the IC301 Pins68, 69 ?
NO
Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting'.
YES
Does the normal RF signal appear at the IC301 Pin78?
NO
Is the V.H.S/W signal applied to the IC301 Pin70?
NO
Check the System Circuit. (IC501 Pin105)
YES
Is V.H.S/W "H" about 3.4V at the IC301 Pin70?
NO
Check the V.H.S/W level. (Check R303, R304)
YES
Clean the Drum.
NO
Replace the IC301.
YES
Does the Y(Luminance) RF signal appear at the IC301 Pin79?
NO
Check the path of the Y(Luminance) RF signal. (Check the C312)
YES
YES
Is the Y(Luminance) Video waveform showed up at theIC301 Pin43?
NO
Check the path of the Y(Luminance) RF signal. (Check C327)
YES
YES
Replace the IC301.

(3) When the C(Color) signal doesn't appear on the screen in PB Mode,

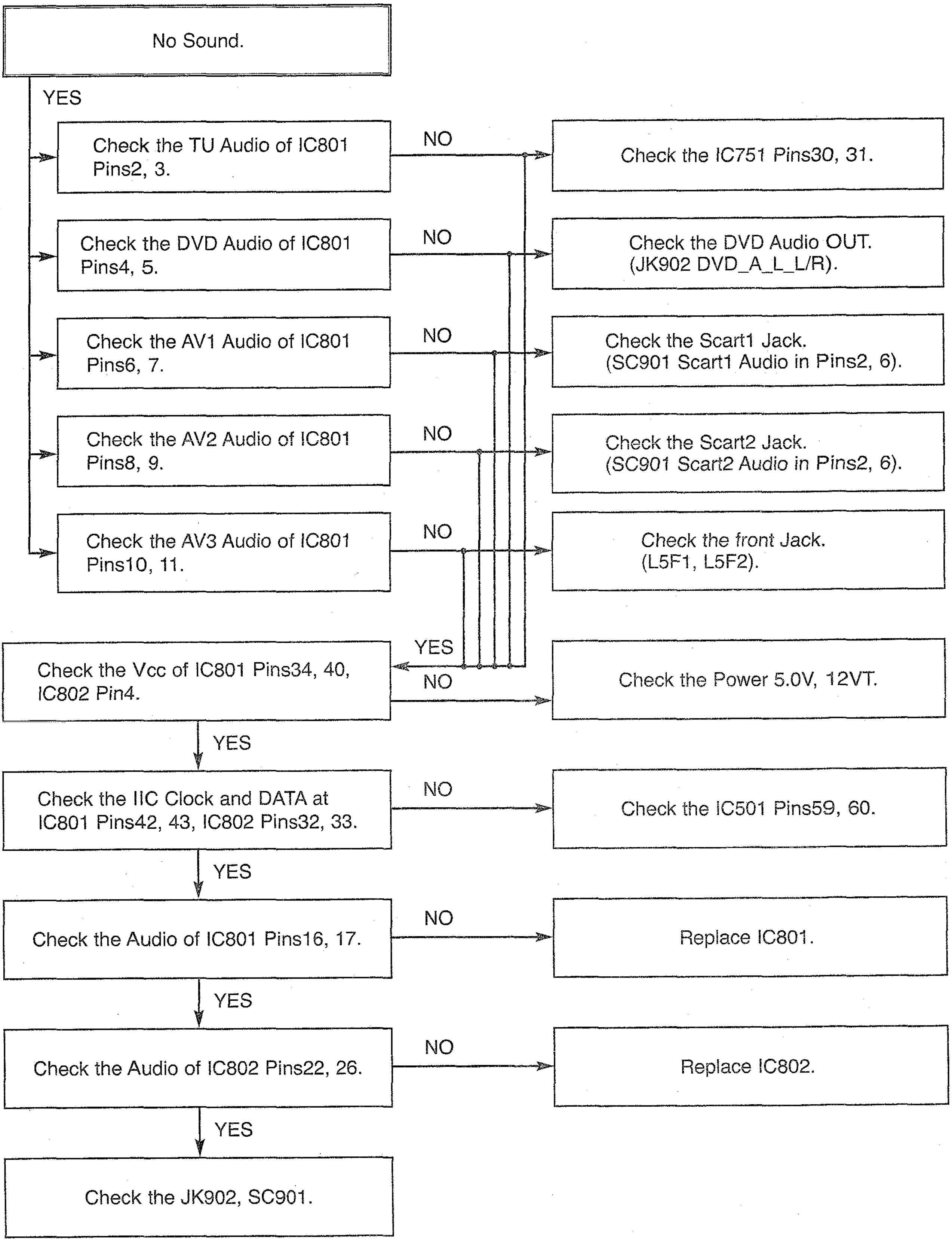

Is 5.0VT/5.3VA applied to the IC301 Pins24, 42, 55, 72, 91.
NO
Check the line of the 5.0VT/ 5.3VA Line. (Power Circuit)
YES
Is the Color Rotary signal applied to the IC301 Pin70?
NO
Check the Color Rotary Circuit. (IC501 Pin99)
YES
Is Color Rotary "H" about 3.4V?
NO
Check the Color Rotary level. (Check the R303)
YES
Does the Color signal appear at the IC301 Pin25 ?
NO
Does the X301(4.43MHZ) oscillate?
NO
Replace the X301.
Does the Color signal appear at the IC301 Pin21?
NO
Check the Color Pass.
YES
Replace the IC301.
YES
Replace the IC301.

(4) When the Video signal doesn't appear on the screen in REC Mode,

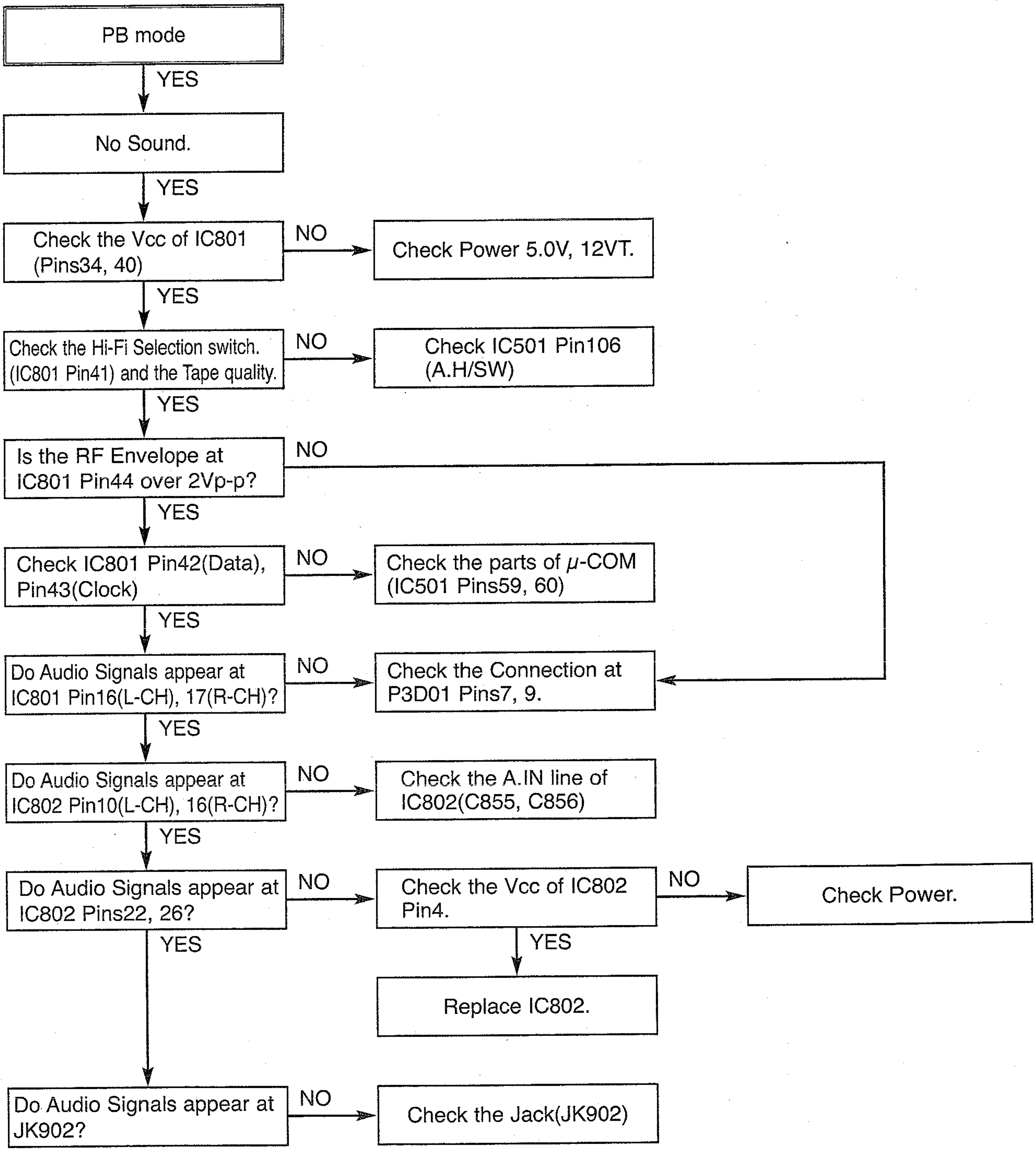

Is the EE signal normal?
NO
Check EE Mode.
YES
Is 5.0VT/5.3VA applied to the IC301 Pins24,42,55,72,91?
NO
Check the line of the 5.0VT/ 5.3VA Line.(Power Circuit)
YES
Does PB Mdoe operate normally?
NO
Check PB Mode.
YES
Does the RF signal appear at the IC301 Pin78?
NO
Is the REC 'H' signal (about 4V) applied to the IC301 Pin80?
NO
Check the System of REC 'H'. (the IC501 Pin47 / the D301)
YES
Check REC Luminance Pass & Color Pass.
YES
Replace the IC301.
YES
Does the REC RF signal appear at the IC301 Pins88,89,94,95?
NO
Check the circuit of the IC301 Pins85, 86.
YES
YES
Check the Drum & Drum Connector

5. Hi-Fi CIRCUIT

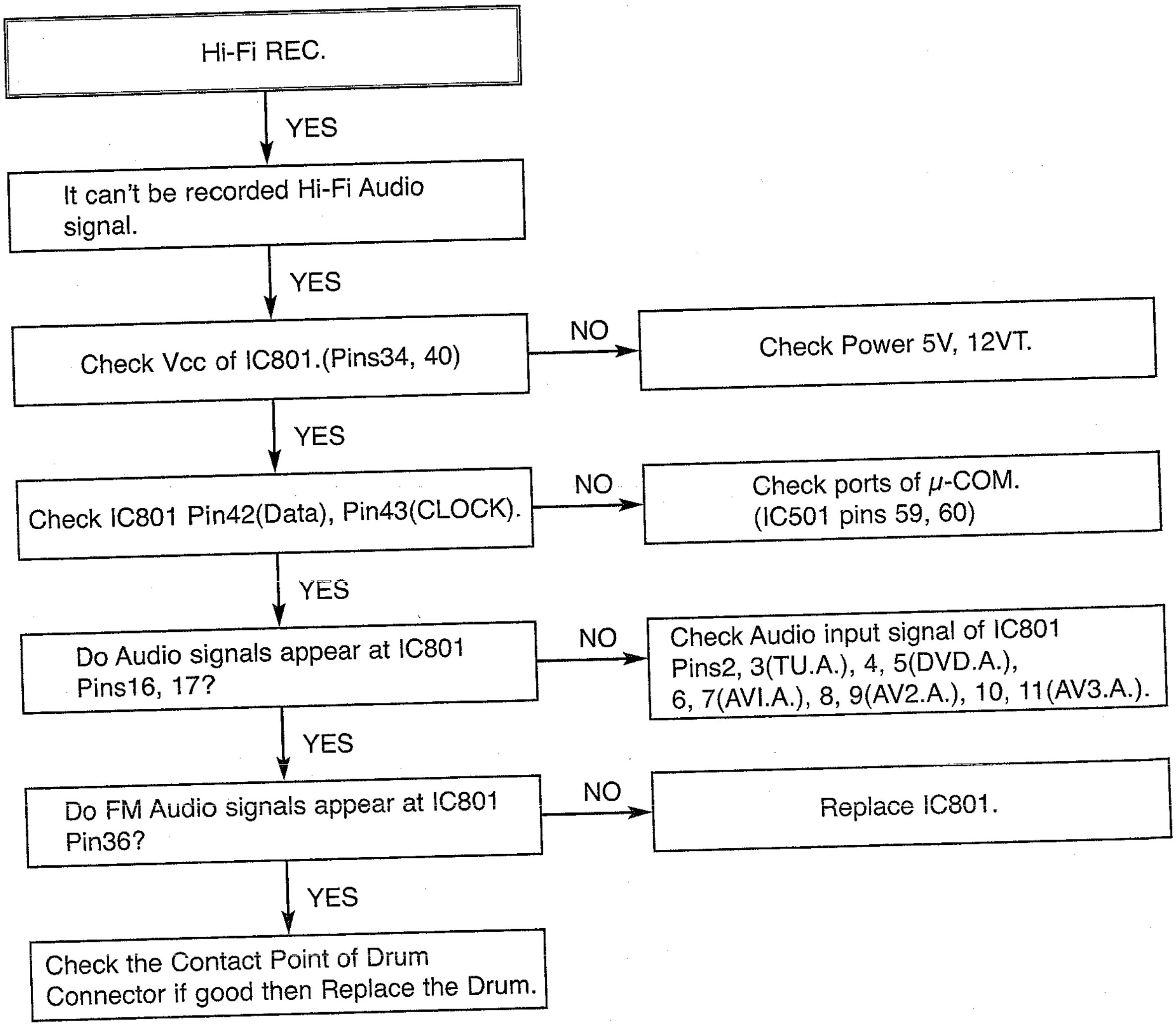
(A) No Sound(EE Mode)


No Sound.
YES
Check the TU Audio of IC801 Pins2, 3.
NO
Check the IC751 Pins30, 31.
Check the DVD Audio of IC801 Pins4, 5.
NO
Check the DVD Audio OUT. (JK902 DVD_A_L_L/R).
Check the AV1 Audio of IC801 Pins6, 7.
NO
Check the Scart1 Jack. (SC901 Scart1 Audio in Pins2, 6).
Check the AV2 Audio of IC801 Pins8, 9.
NO
Check the Scart2 Jack. (SC901 Scart2 Audio in Pins2, 6).
Check the AV3 Audio of IC801 Pins10, 11.
NO
Check the front Jack. (L5F1, L5F2).
YES
Check the Vcc of IC801 Pins34, 40, IC802 Pin4.
NO
Check the Power 5.0V, 12VT.
YES
Check the IIC Clock and DATA at IC801 Pins42, 43, IC802 Pins32, 33.
NO
Check the IC501 Pins59, 60.
YES
Check the Audio of IC801 Pins16, 17.
NO
Replace IC801.
YES
Check the Audio of IC802 Pins22, 26.
NO
Replace IC802.
YES
Check the JK902, SC901.

(B) Hi-Fi Playback

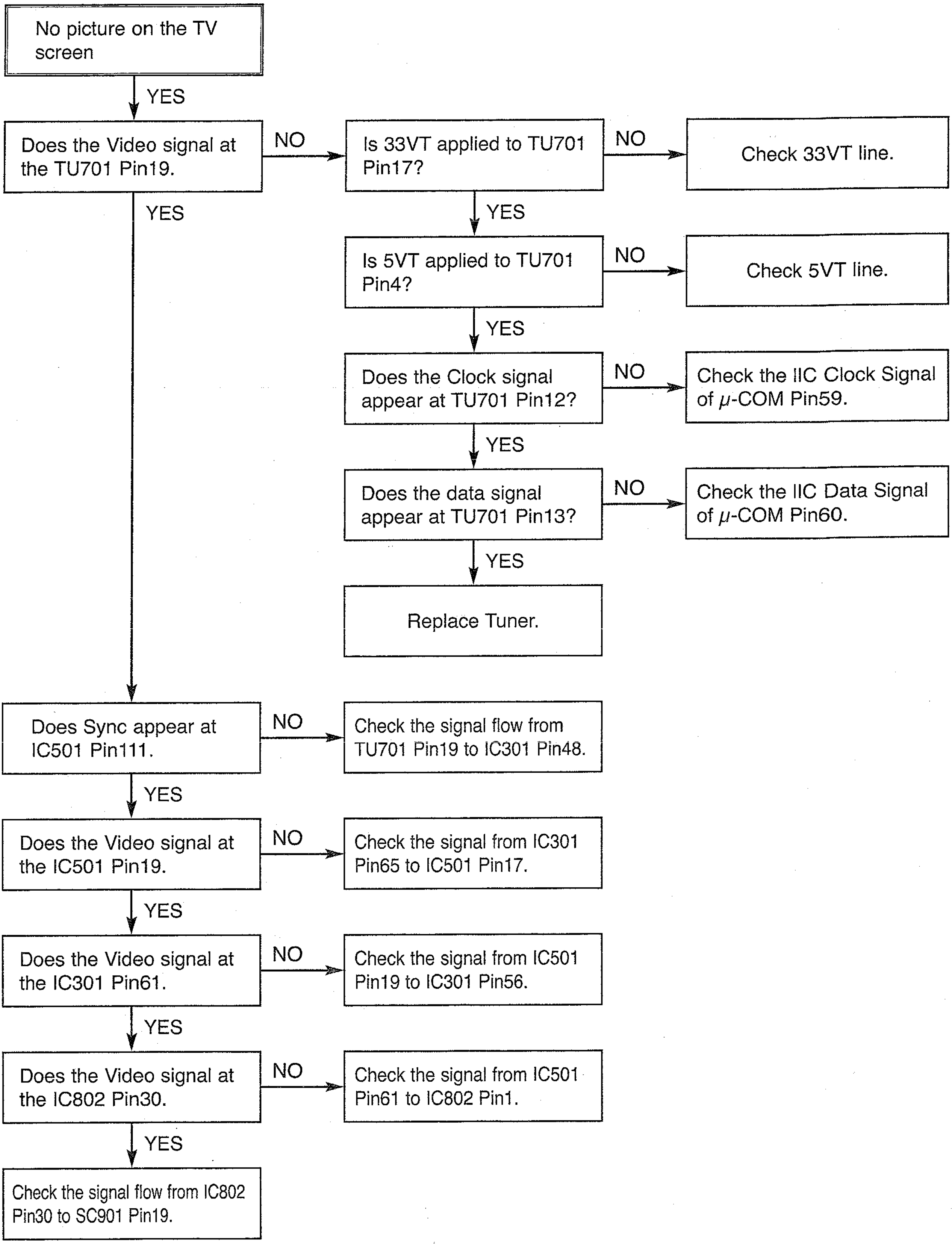

PB mode
YES
No Sound.
YES
Check the Vcc of IC801 (Pins34, 40)
NO
Check Power 5.0V, 12VT.
YES
Check the Hi-Fi Selection switch. (IC801 Pin41) and the Tape quality.
NO
Check IC501 Pin106 (A.H/SW)
YES
Is the RF Envelope at IC801 Pin44 over 2Vp-p?
NO
YES
Check IC801 Pin42(Data), Pin43(Clock)
NO
Check the parts of μ-COM (IC501 Pins59, 60)
YES
Do Audio Signals appear at IC801 Pin16(L-CH), 17(R-CH)?
NO
Check the Connection at P3D01 Pins7, 9.
YES
Do Audio Signals appear at IC802 Pin10(L-CH), 16(R-CH)?
NO
Check the A.IN line of IC802(C855, C856)
YES
Do Audio Signals appear at IC802 Pins22, 26?
NO
Check the Vcc of IC802 Pin4.
NO
Check Power.
YES
Replace IC802.
YES
Do Audio Signals appear at JK902?
NO
Check the Jack(JK902)

(C)

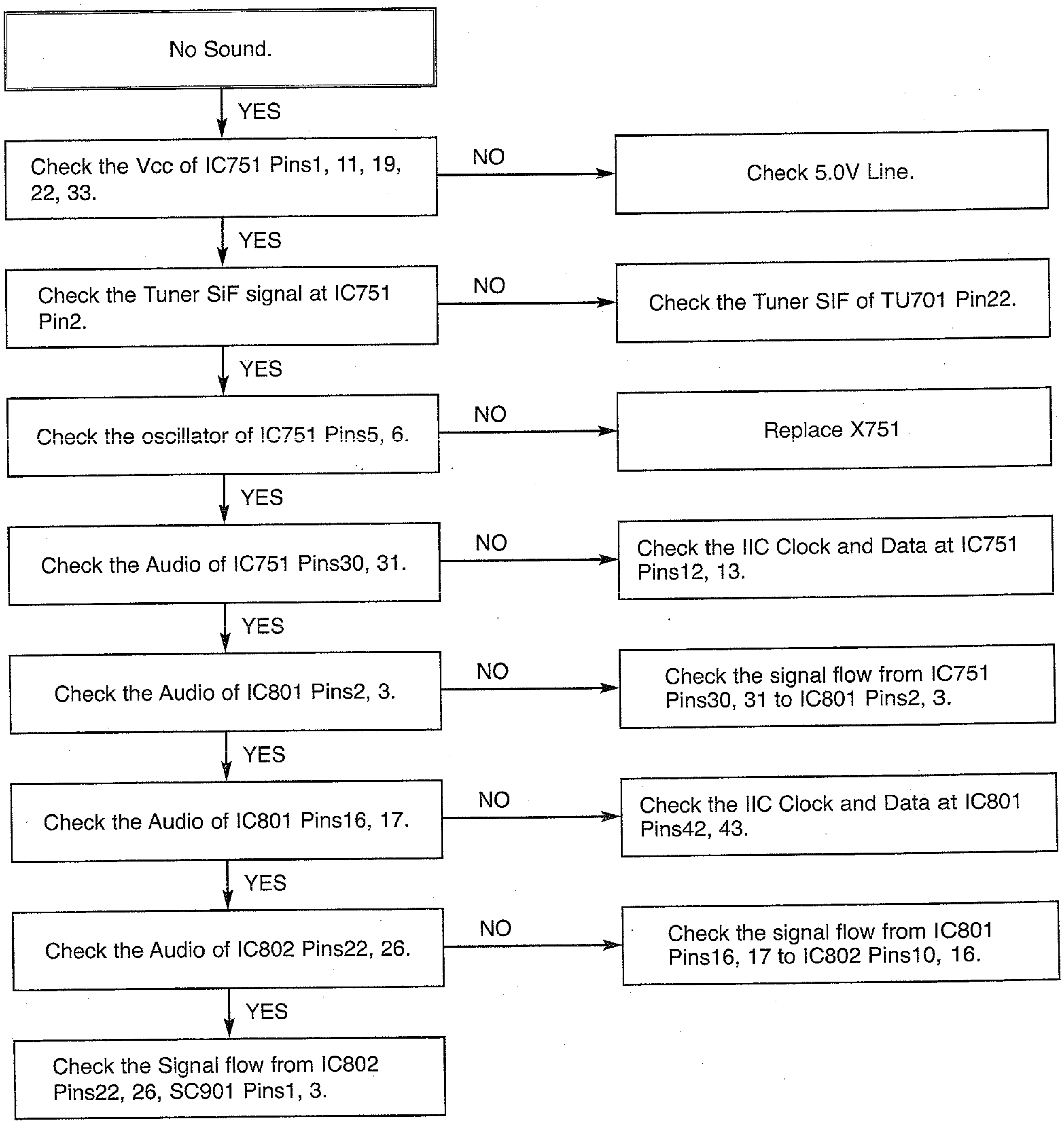

Hi-Fi REC.
YES
It can't be recorded Hi-Fi Audio signal.
YES
Check Vcc of IC801.(Pins34, 40)
NO
Check Power 5V, 12VT.
YES
Check IC801 Pin42(Data), Pin43(CLOCK).
NO
Check ports of μ-COM. (IC501 pins 59, 60)
YES
Do Audio signals appear at IC801 Pins16, 17?
NO
Check Audio input signal of IC801 Pins2, 3(TU.A.), 4, 5(DVD.A.), 6, 7(AVI.A.), 8, 9(AV2.A.), 10, 11(AV3.A.).
YES
Do FM Audio signals appear at IC801 Pin36?
NO
Replace IC801.
YES
Check the Contact Point of Drum Connector if good then Replace the Drum.

6. Tuner/IF CIRCUIT

(A) No Picture on the TV screen

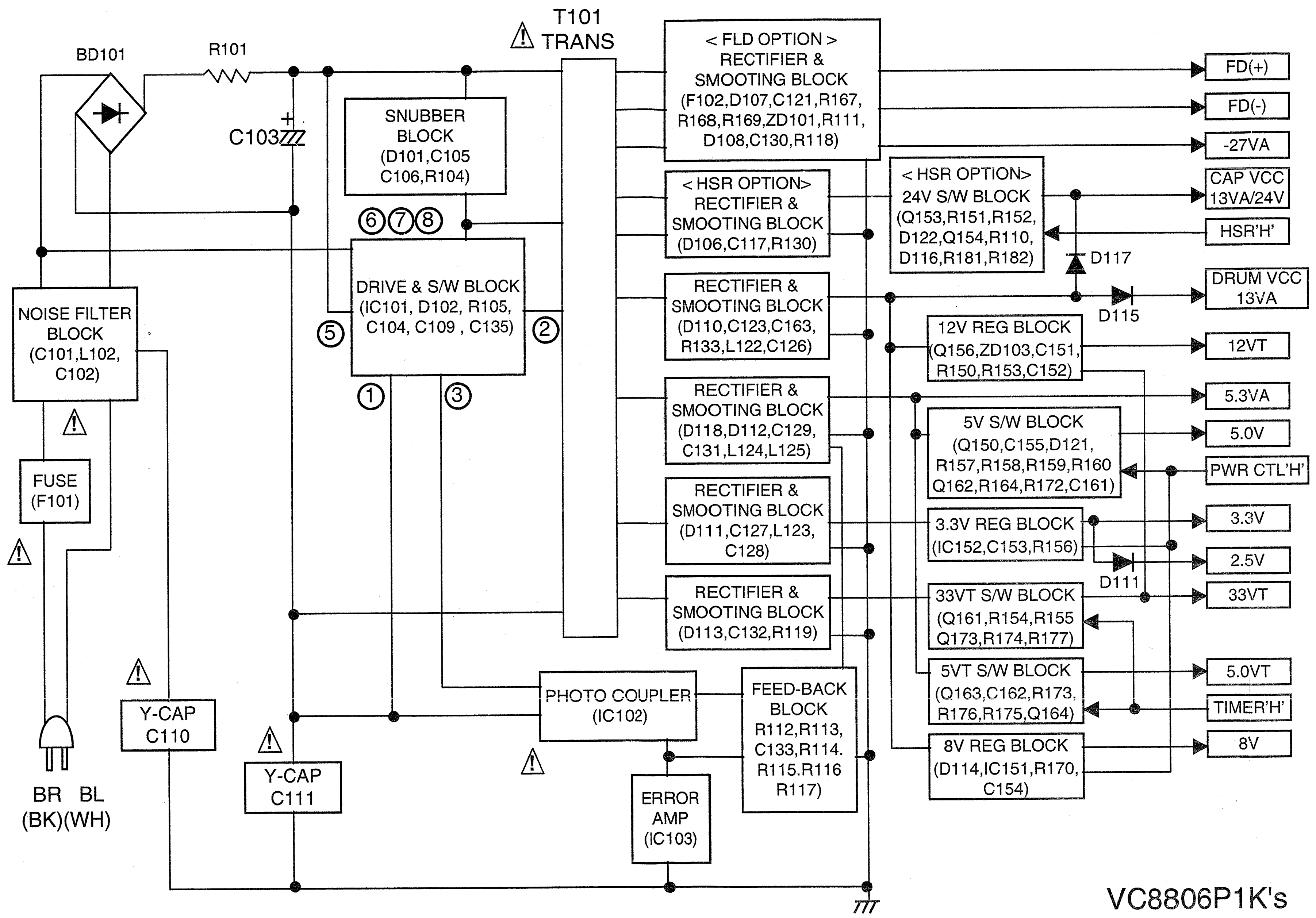

No picture on the TV screen
YES
Does the Video signal at the TU701 Pin19.
NO
Is 33VT applied to TU701 Pin17?
NO
Check 33VT line.
YES
Is 5VT applied to TU701 Pin4?
NO
Check 5VT line.
YES
Does the Clock signal appear at TU701 Pin12?
NO
Check the IIC Clock Signal of μ-COM Pin59.
YES
Does the data signal appear at TU701 Pin13?
NO
Check the IIC Data Signal of μ-COM Pin60.
YES
Replace Tuner.
YES
Does Sync appear at IC501 Pin111.
NO
Check the signal flow from TU701 Pin19 to IC301 Pin48.
YES
Does the Video signal at the IC501 Pin19.
NO
Check the signal from IC301 Pin65 to IC501 Pin17.
YES
Does the Video signal at the IC301 Pin61.
NO
Check the signal from IC501 Pin19 to IC301 Pin56.
YES
Does the Video signal at the IC802 Pin30.
NO
Check the signal from IC501 Pin61 to IC802 Pin1.
YES
Check the signal flow from IC802 Pin30 to SC901 Pin19.

(B) No Sound

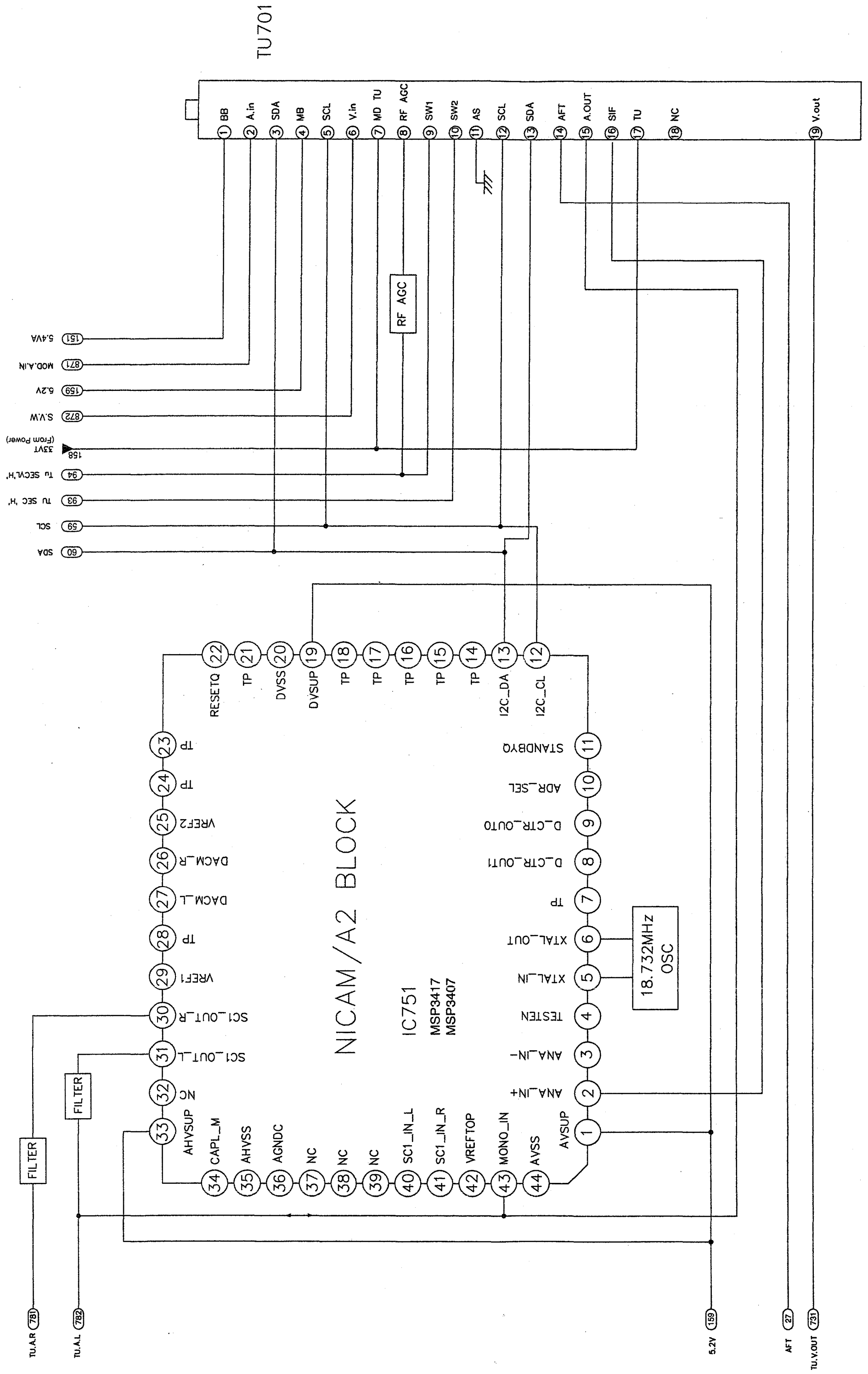

No Sound.
YES
Check the Vcc of IC751 Pins1, 11, 19, 22, 33.
NO
Check 5.0V Line.
YES
Check the Tuner SiF signal at IC751 Pin2.
NO
Check the Tuner SIF of TU701 Pin22.
YES
Check the oscillator of IC751 Pins5, 6.
NO
Replace X751
YES
Check the Audio of IC751 Pins30, 31.
NO
Check the IIC Clock and Data at IC751 Pins12, 13.
YES
Check the Audio of IC801 Pins2, 3.
NO
Check the signal flow from IC751 Pins30, 31 to IC801 Pins2, 3.
YES
Check the Audio of IC801 Pins16, 17.
NO
Check the IIC Clock and Data at IC801 Pins42, 43.
YES
Check the Audio of IC802 Pins22, 26.
NO
Check the signal flow from IC801 Pins16, 17 to IC802 Pins10, 16.
YES
Check the Signal flow from IC802 Pins22, 26, SC901 Pins1, 3.

BLOCK DIAGRAMS

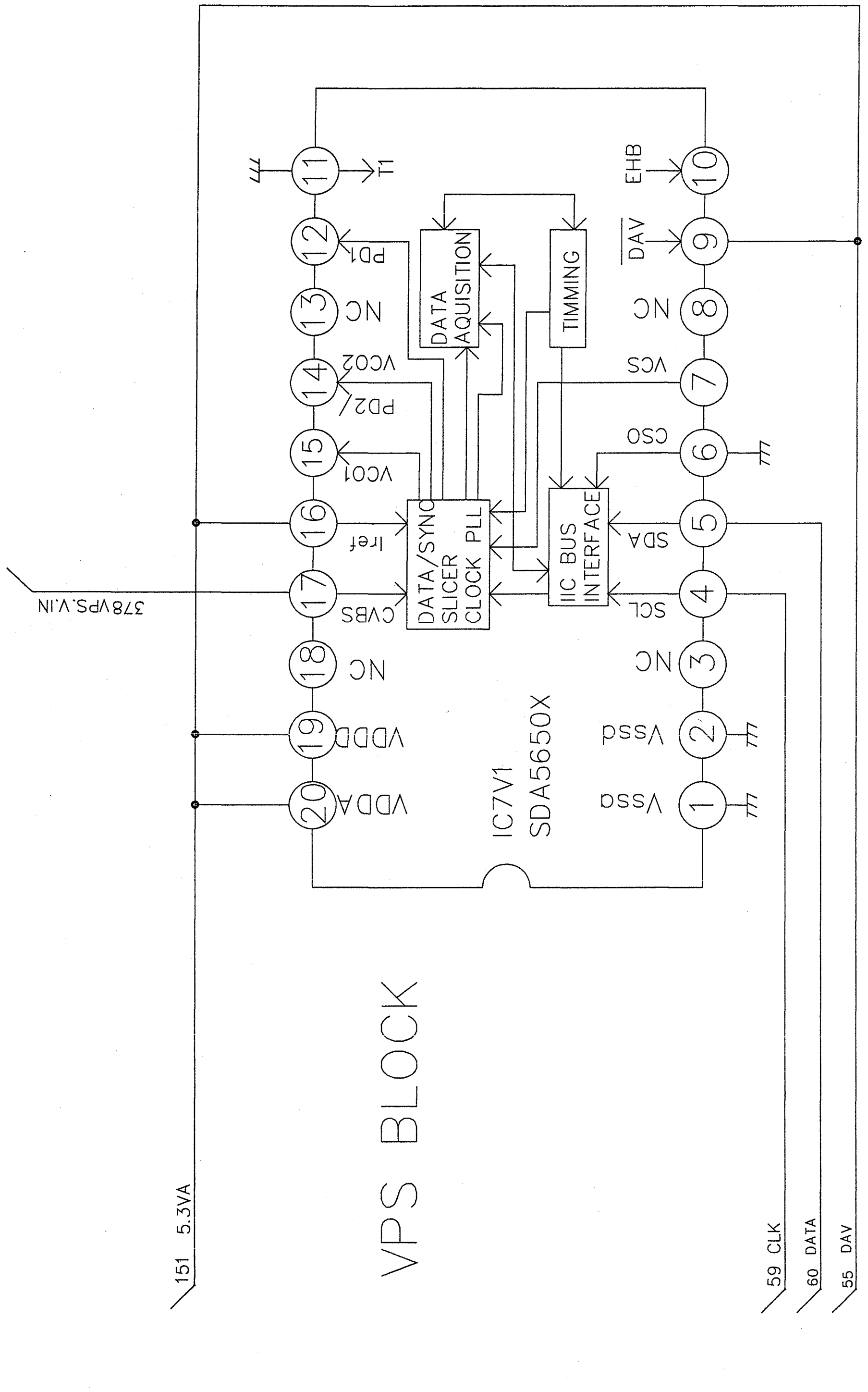
1. POWER(SMPS) BLOCK DIAGRAM


T101
TRANS
BD101
R101
C103
SNUBBER BLOCK (D101,C105 C106,R104)
⑥⑦⑧
DRIVE & S/W BLOCK (IC101, D102, R105, C104, C109 , C135)
⑤
②
①
③
NOISE FILTER BLOCK (C101,L102, C102)
FUSE (F101)
Y-CAP C110
Y-CAP C111
BR BL
(BK)(WH)
PHOTO COUPLER (IC102)
FEED-BACK BLOCK R112,R113, C133,R114. R115.R116 R117)
ERROR AMP (IC103)
< FLD OPTION > RECTIFIER & SMOOTHING BLOCK (F102,D107,C121,R167, R168,R169,ZD101,R111, D108,C130,R118)
< HSR OPTION> RECTIFIER & SMOOTHING BLOCK (D106,C117,R130)
< HSR OPTION> 24V S/W BLOCK (Q153,R151,R152, D122,Q154,R110, D116,R181,R182)
RECTIFIER & SMOOTHING BLOCK (D110,C123,C163, R133,L122,C126)
RECTIFIER & SMOOTHING BLOCK (D118,D112,C129, C131,L124,L125)
RECTIFIER & SMOOTHING BLOCK (D111,C127,L123, C128)
RECTIFIER & SMOOTHING BLOCK (D113,C132,R119)
12V REG BLOCK (Q156,ZD103,C151, R150,R153,C152)
5V S/W BLOCK (Q150,C155,D121, R157,R158,R159,R160 Q162,R164,R172,C161)
3.3V REG BLOCK (IC152,C153,R156)
33VT S/W BLOCK (Q161,R154,R155 Q173,R174,R177)
5VT S/W BLOCK (Q163,C162,R173, R176,R175,Q164)
8V REG BLOCK (D114,IC151,R170, C154)
D117
D115
D111
FD(+)
FD(-)
-27VA
CAP VCC 13VA/24V
HSR'H'
DRUM VCC 13VA
12VT
5.3VA
5.0V
PWR CTL'H'
3.3V
2.5V
33VT
5.0VT
TIMER'H'
8V
VC8806P1K's

2. Tu/IF, NICAM & A2 BLOCK DIAGRAM


TU701
BB
A.in
SDA
MB
SCL
V.in
MD TU
RF AGC
SW1
SW2
AS
SCL
SDA
AFT
A.OUT
SIF
TU
NC
V.out
RF AGC
NICAM/A2 BLOCK
IC751
MSP3417
MSP3407
18.732MHz
OSC
RESETQ
TP
DVSS
DVSUP
I2C_DA
I2C_CL
STANDBYQ
ADR_SEL
D_CTR_OUT0
D_CTR_OUT1
XTAL_OUT
XTAL_IN
TESTEN
ANA_IN-
ANA_IN+
AVSUP
AVSS
MONO_IN
VREFTOP
SC1_IN_R
SC1_IN_L
NC
AGNDC
AHVSS
CAPL_M
AHVSUP
SC1_OUT_L
SC1_OUT_R
VREF1
DACM_L
DACM_R
VREF2
FILTER
FILTER
5.2V
AFT

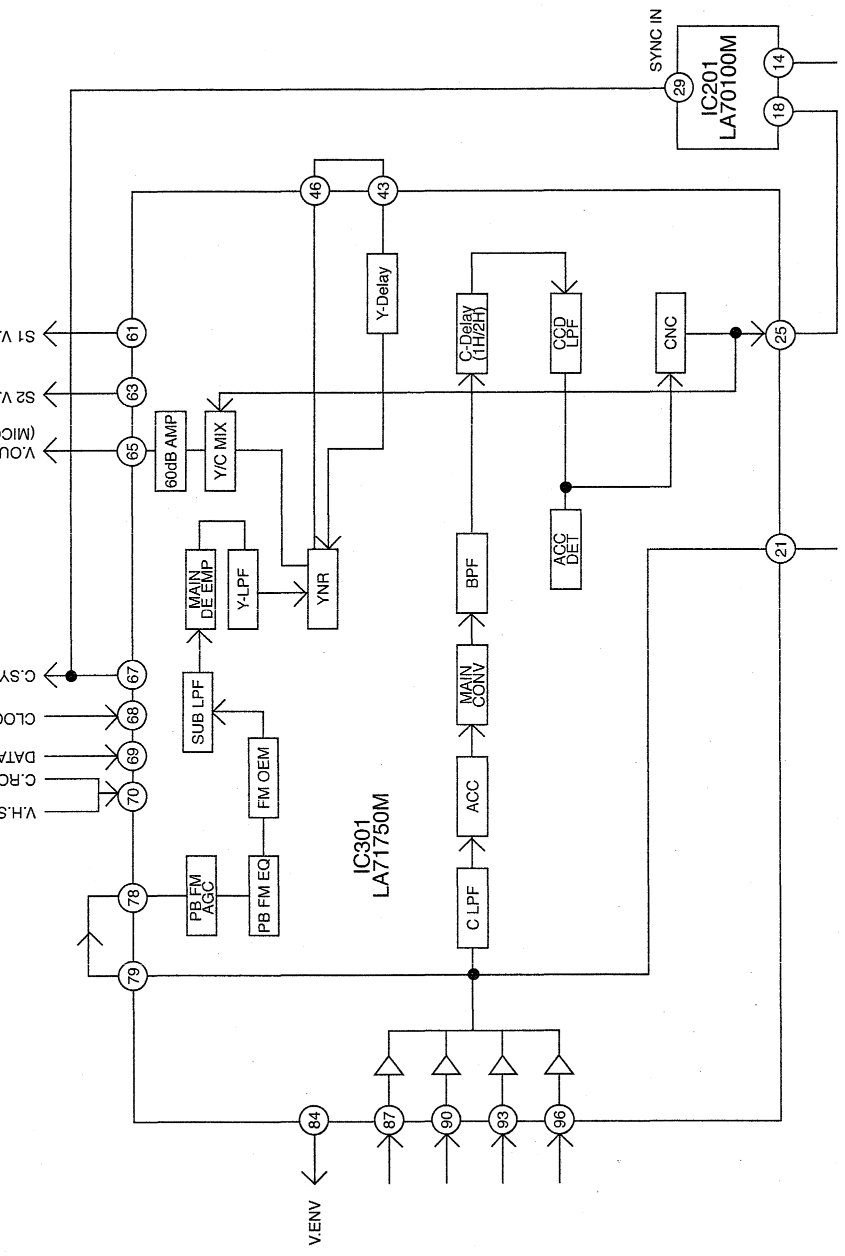
3. VPS BLOCK DIAGRAM


T1
PD1
NC
VCO2
PD2
VCO1
Iref
CVBS
NC
VDDD
VDDA
DATA AQUISITION
TIMING
DATA/SYNC SLICER CLOCK PLL
IIC BUS INTERFACE
EHB
DAV
NC
VCS
CSO
SDA
SCL
NC
Vssd
Vssa
IC7V1
SDA5650X
378VPS.V.IN
VPS BLOCK
151 5.3VA
59 CLK
60 DATA
55 DAV

COMBI SCART
VC8806P1K's

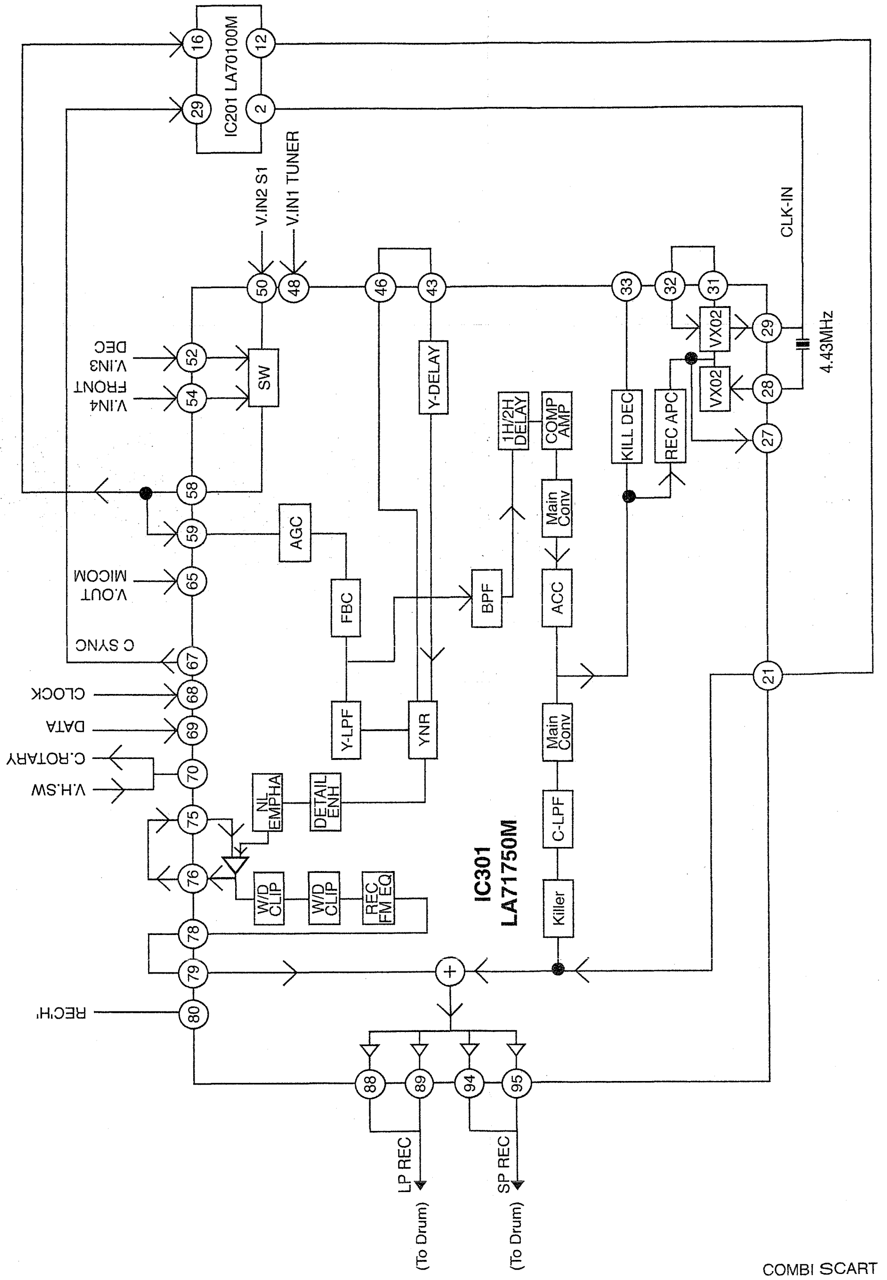
4. Y/C BLOCK DIAGRAM

(PB MODE)



SYNC IN
IC201
LA70100M
29
14
18
46
43
Y-Delay
C-Delay (1H/2H)
CCD LPF
CNC
25
61
63
65
S1 V.OUT
S2 V.OUT
V.OUT (MICOM)
60dB AMP
Y/C MIX
MAIN DE EMP
Y-LPF
YNR
BPF
ACC DET
21
MAIN CONV
ACC
C LPF
IC301
LA71750M
67
68
69
70
C.SYNC
CLOCK
DATA
C.ROTARY
V.H.SW
SUB LPF
FM OEM
PB FM AGC
PB FM EQ
78
79
84
87
90
93
96
V.ENV

(REC MODE)



IC201 LA70100M
16
12
29
2
V.IN2 S1
V.IN1 TUNER
CLK-IN
50
48
46
43
33
32
31
29
28
27
4.43MHz
VX02
VX02
REC APC
KILL DEC
COMP AMP
1H/2H DELAY
Y-DELAY
SW
52
54
58
59
65
67
68
69
70
75
76
78
79
80
V.IN3 DEC
V.IN4 FRONT
V.OUT MICOM
C SYNC
CLOCK
DATA
C.ROTARY
V.H.SW
REC'H'
AGC
FBC
BPF
Main Conv
ACC
Y-LPF
YNR
NL EMPHA
DETAIL ENH
W/D CLIP
W/D CLIP
REC FM EQ
Main Conv
C-LPF
Killer
IC301
LA71750M
21
88
89
94
95
LP REC
(To Drum)
SP REC
(To Drum)

COMBI SCART
VC8806P1K's

CIRCUIT DIAGRAMS

1. POWER(SMPS) CIRCUIT DIAGRAM 1

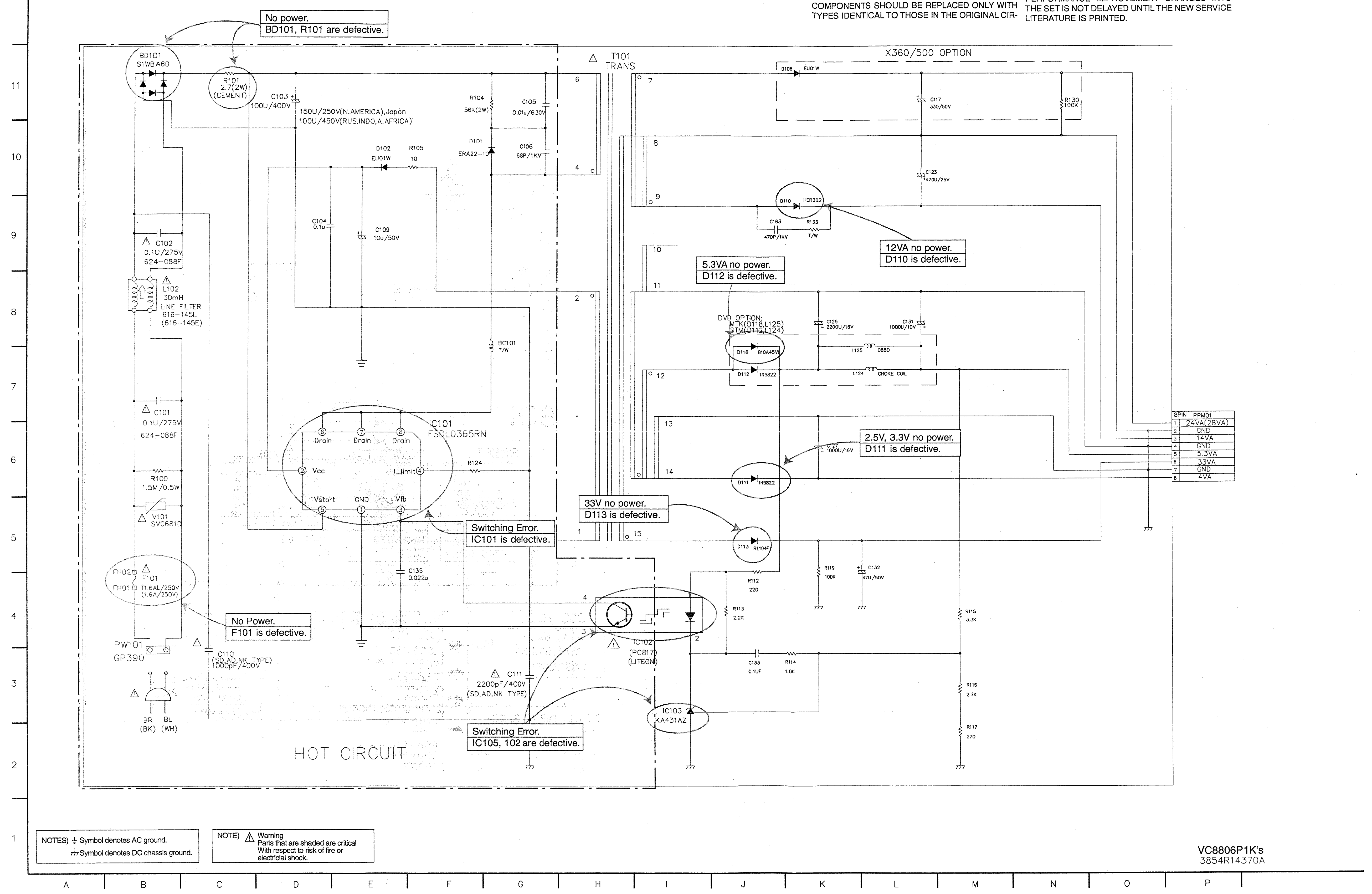
IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE LG ELECTRONICS CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT. SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION.

THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

NOTE :

1. Shaded(■) parts are critical for safety. Replace only with specified part number.
2. Voltages are DC-measured with a digital voltmeter during Play mode.

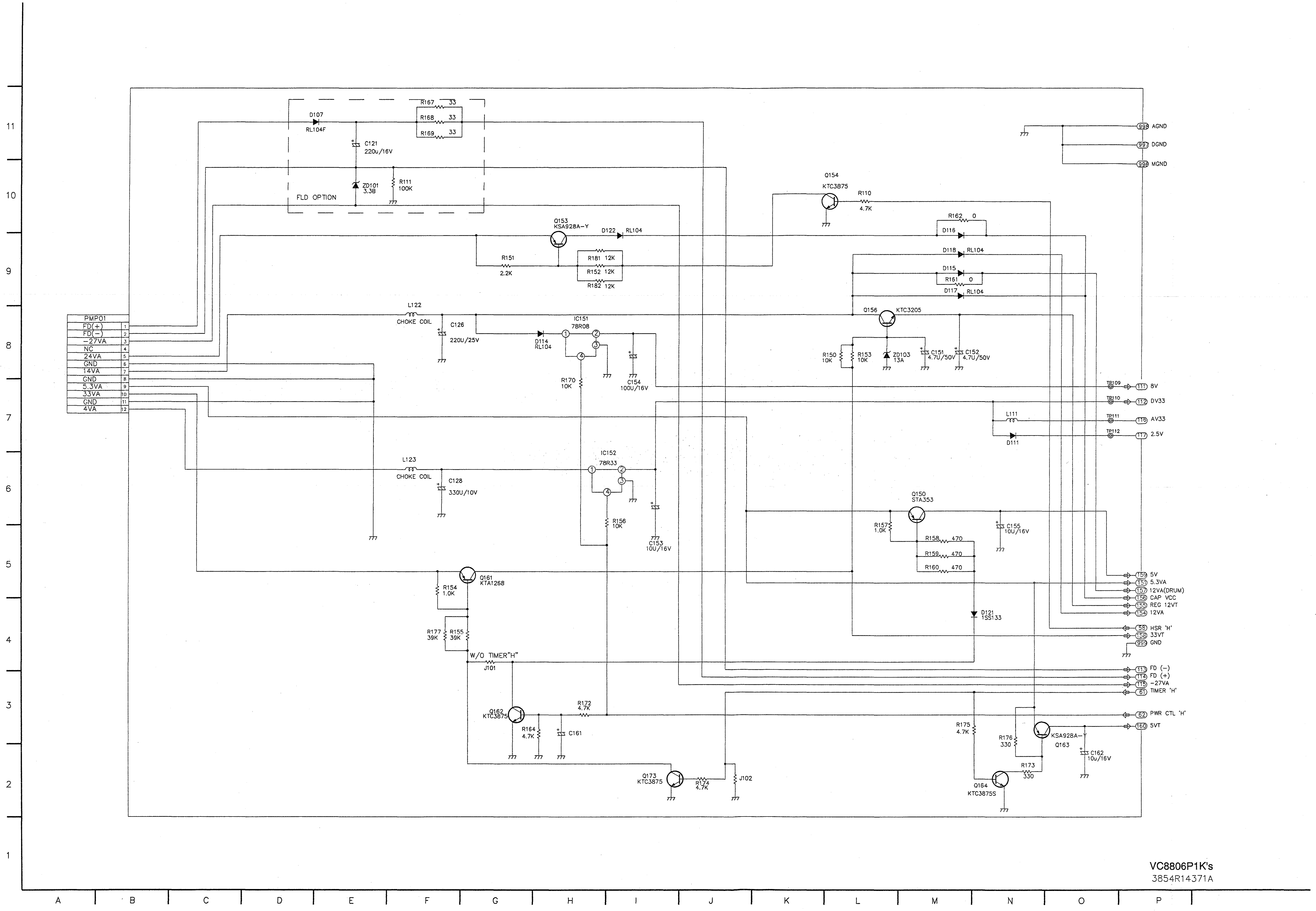

No power.
BD101, R101 are defective.
BD101
S1WBA60
R101
2.7(2W)
(CEMENT)
C103
100U/400V
150U/250V(N.AMERICA),Japan
100U/450V(RUS,INDO,A.AFRICA)
R104
56K(2W)
C105
0.01u/630V
D101
ERA22-10
C106
68P/1KV
D102
EU01W
R105
10
C104
0.1u
C109
10u/50V
C102
0.1U/275V
624-088F
L102
30mH
LINE FILTER
616-145L
(616-145E)
BC101
T/W
C101
0.1U/275V
624-088F
IC101
FSDL0365RN
Drain
Drain
Drain
Vcc
I_limit
Vstart
GND
Vfb
R124
R100
1.5M/0.5W
V101
SVC681D
Switching Error.
IC101 is defective.
FH02
F101
FH01
T1.6AL/250V
(1.6A/250V)
C135
0.022u
No Power.
F101 is defective.
PW101
GP390
C110
(SD,AD,NK TYPE)
1000pF/400V
C111
2200pF/400V
(SD,AD,NK TYPE)
BR
BL
(BK)
(WH)
HOT CIRCUIT
Switching Error.
IC105, 102 are defective.
T101
TRANS
6
4
2
1
7
8
9
10
11
12
13
14
15
X360/500 OPTION
D106
EU01W
C117
330/50V
R130
100K
C123
470U/25V
D110
HER302
C163
470P/1KV
R133
T/W
12VA no power.
D110 is defective.
5.3VA no power.
D112 is defective.
DVD OPTION:
MTK(D118,L125)
STM(D112,L124)
C129
2200U/16V
C131
1000U/10V
D118
B10A45VI
L125
088D
D112
1N5822
L124
CHOKE COIL
C127
1000U/16V
2.5V, 3.3V no power.
D111 is defective.
D111
1N5822
33V no power.
D113 is defective.
D113
RL104F
R112
220
R113
2.2K
R119
100K
C132
47U/50V
R115
3.3K
IC102
(PC817)
(LITEON)
C133
0.1UF
R114
1.0K
R116
2.7K
R117
270
IC103
KA431AZ
8PIN PPM01
1 24VA(28VA)
2 GND
3 14VA
4 GND
5 5.3VA
6 33VA
7 GND
8 4VA
11
10
9
8
7
6
5
4
3
2
1
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

NOTES) ⏚ Symbol denotes AC ground.
⏚ Symbol denotes DC chassis ground.

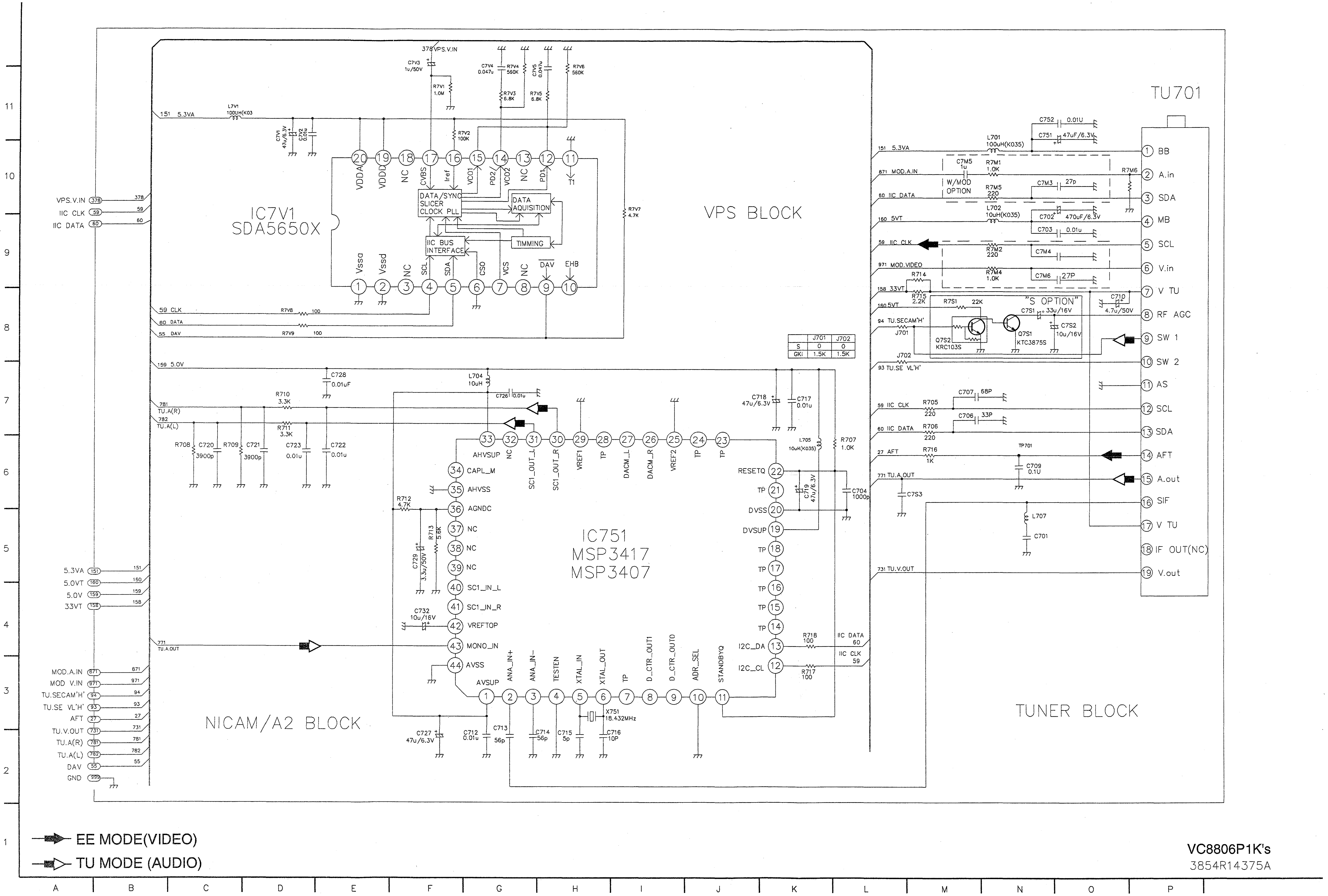
NOTE) ⚠ Warning
Parts that are shaded are critical
With respect to risk of fire or
electricial shock.

VC8806P1K's
3854R14370A

2. POWER(SMPS) CIRCUIT DIAGRAM 2


11
10
9
8
7
6
5
4
3
2
1
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
PMP01
FD(+) 1
FD(−) 2
−27VA 3
NC 4
24VA 5
GND 6
14VA 7
GND 8
5.3VA 9
33VA 10
GND 11
4VA 12
D107
RL104F
C121
220u/16V
R167 33
R168 33
R169 33
ZD101
3.3B
R111
100K
FLD OPTION
Q153
KSA928A−Y
D122 RL104
R151
2.2K
R181 12K
R152 12K
R182 12K
L122
CHOKE COIL
C126
220U/25V
D114
RL104
IC151
78R08
R170
10K
C154
100U/16V
L123
CHOKE COIL
C128
330U/10V
IC152
78R33
R156
10K
C153
10U/16V
Q161
KTA1268
R154
1.0K
R177
39K
R155
39K
W/O TIMER"H"
J101
Q162
KTC3875
R164
4.7K
C161
R172
4.7K
Q173
KTC3875
R174
4.7K
J102
Q154
KTC3875
R110
4.7K
R162 0
D116
D118 RL104
D115
R161 0
D117 RL104
Q156 KTC3205
R150
10K
R153
10K
ZD103
13A
C151
4.7U/50V
C152
4.7U/50V
998 AGND
997 DGND
996 MGND
TP109 111 8V
TP110 112 DV33
TP111 116 AV33
TP112 117 2.5V
L111
D111
Q150
STA353
R157
1.0K
R158 470
R159 470
R160 470
C155
10U/16V
D121
1SS133
159 5V
151 5.3VA
157 12VA(DRUM)
156 CAP VCC
155 REG 12VT
154 12VA
58 HSR 'H'
158 33VT
999 GND
113 FD (−)
114 FD (+)
115 −27VA
61 TIMER 'H'
62 PWR CTL 'H'
160 5VT
R175
4.7K
R176
330
KSA928A−Y
Q163
C162
10u/16V
R173
330
Q164
KTC3875S
VC8806P1K's
3854R14371A

3. TU/IF, NICAM & A2 CIRCUIT DIAGRAM


IC7V1
SDA5650X
VPS BLOCK
DATA/SYNC SLICER CLOCK PLL
DATA AQUISITION
IIC BUS INTERFACE
TIMING
VDDA
VDDD
NC
CVBS
Iref
VCO1
PD2/VCO2
PD1
T1
Vssa
Vssd
SCL
SDA
CSO
VCS
DAV
EHB
IC751
MSP3417
MSP3407
NICAM/A2 BLOCK
AHVSUP
CAPL_M
AHVSS
AGNDC
SC1_IN_L
SC1_IN_R
VREFTOP
MONO_IN
AVSS
AVSUP
ANA_IN+
ANA_IN-
TESTEN
XTAL_IN
XTAL_OUT
TP
D_CTR_OUT1
D_CTR_OUT0
ADR_SEL
STANDBYQ
I2C_CL
I2C_DA
RESETQ
DVSS
DVSUP
SC1_OUT_L
SC1_OUT_R
VREF1
DACM_L
DACM_R
VREF2
X751 18.432MHz
TU701
TUNER BLOCK
BB
A.in
SDA
MB
SCL
V.in
V TU
RF AGC
SW 1
SW 2
AS
AFT
A.out
SIF
IF OUT(NC)
V.out
W/MOD OPTION
"S OPTION"
Q7S1 KTC3875S
Q7S2 KRC103S
VPS.V.IN
IIC CLK
IIC DATA
5.3VA
5.0VT
5.0V
33VT
MOD.A.IN
MOD V.IN
TU.SECAM'H'
TU.SE VL'H'
AFT
TU.V.OUT
TU.A(R)
TU.A(L)
DAV
GND
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
11
10
9
8
7
6
5
4
3
2
1

	J701	J702
S	0	0
GKI	1.5K	1.5K

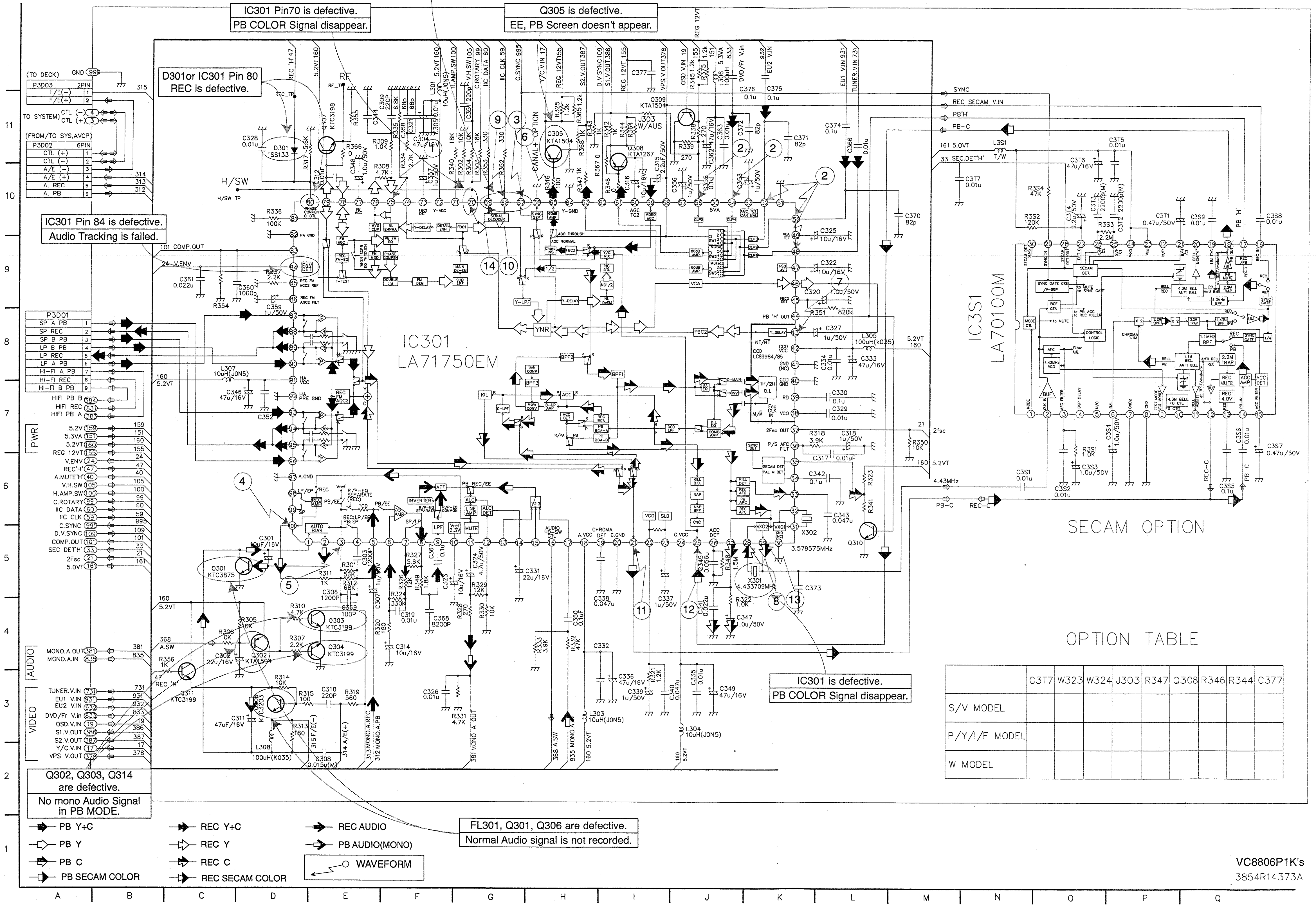
EE MODE(VIDEO)

TU MODE (AUDIO)

VC8806P1K's

3854R14375A

4. A/V CIRCUIT DIAGRAM


IC301
LA71750EM
IC3S1
LA70100M
SECAM OPTION
H/SW
TO SYSTEM
(TO DECK)
P3D03
P3D02
P3D01
PWR
AUDIO
VIDEO
Q301 KTC3875
Q302 KTA1504
Q303 KTC3199
Q304 KTC3199
Q305 KTA1504
Q307 KTC3198
Q308 KTA1267
Q309 KTA1504
Q311 KTC3199
X301 4.433709MHz
X302 3.579575MHz
VC8806P1K's
3854R14373A

IC301 Pin 69, 68 are defective.
PB and Recording is failed.
(IC301 doesn't operate.)

IC301 Pin70 is defective.
PB COLOR Signal disappear.

Q305 is defective.
EE, PB Screen doesn't appear.

D301or IC301 Pin 80
REC is defective.

IC301 Pin 84 is defective.
Audio Tracking is failed.

IC301 is defective.
PB COLOR Signal disappear.

Q302, Q303, Q314
are defective.
No mono Audio Signal
in PB MODE.

FL301, Q301, Q306 are defective.
Normal Audio signal is not recorded.

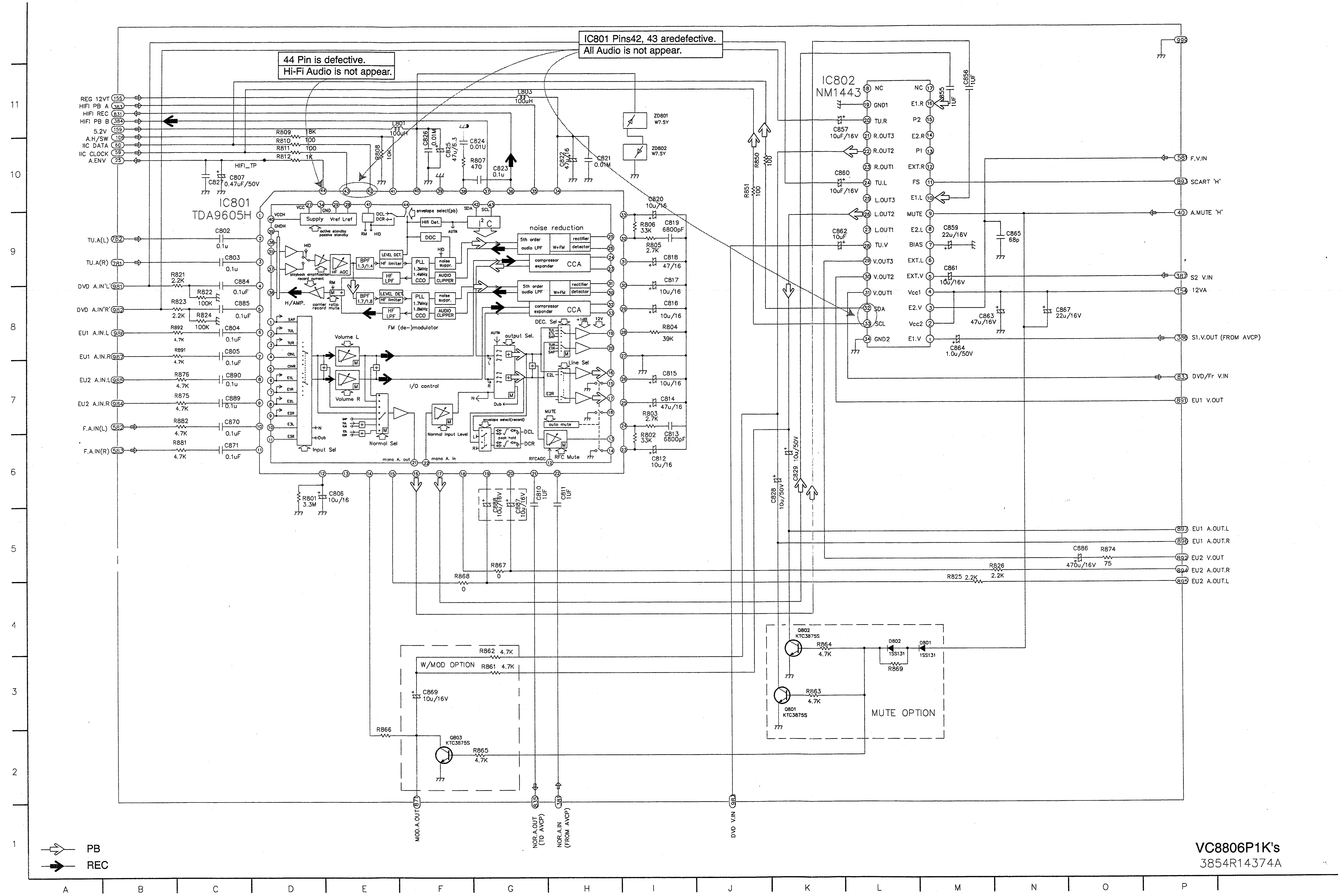
OPTION TABLE

	C3T7	W323	W324	J303	R347	Q308	R346	R344	C377
S/V MODEL									
P/Y/I/F MODEL									
W MODEL									

- PB Y+C
- PB Y
- PB C
- PB SECAM COLOR
- REC Y+C
- REC Y
- REC C
- REC SECAM COLOR
- REC AUDIO
- PB AUDIO(MONO)
- WAVEFORM

VC8806P1K's
3854R14373A

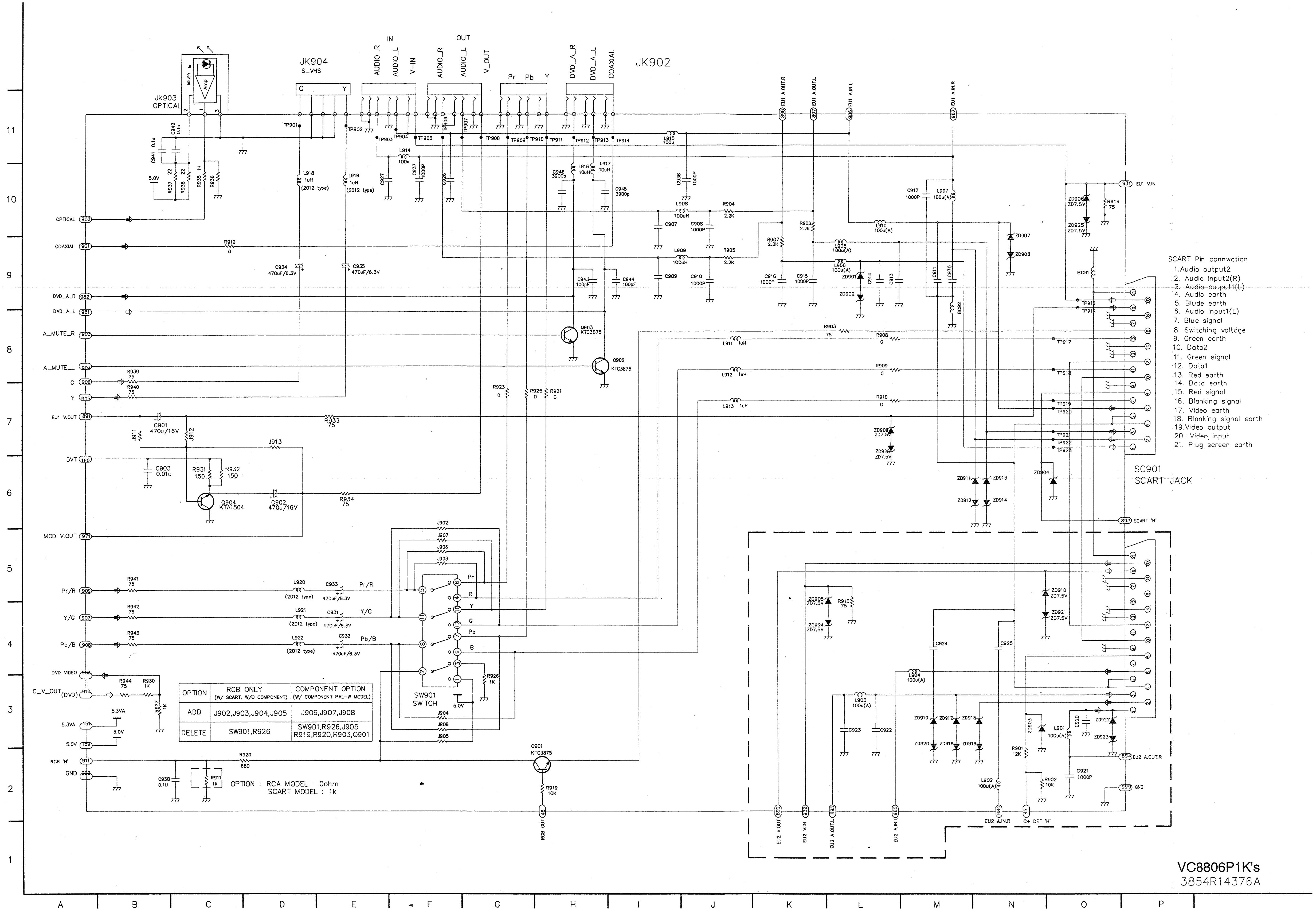
5. Hi-Fi CIRCUIT DIAGRAM



IC801 Pins42, 43 aredefective.
All Audio is not appear.
44 Pin is defective.
Hi-Fi Audio is not appear.
IC801
TDA9605H
IC802
NM1443
REG 12VT
HIFI PB A
HIFI REC
HIFI PB B
5.2V
A.H/SW
IIC DATA
IIC CLOCK
A.ENV
HIFI_TP
TU.A(L)
TU.A(R)
DVD A.IN'L'
DVD A.IN'R'
EU1 A.IN.L
EU1 A.IN.R
EU2 A.IN.L
EU2 A.IN.R
F.A.IN(L)
F.A.IN(R)
noise reduction
H/AMP.
FM (de-)modulator
I/O control
Volume L
Volume R
Input Sel
Normal Sel
Normal Input Level
output Sel.
Line Sel
RFC Mute
auto mute
ZD801
W7.5Y
ZD802
W7.5Y
F.V.IN
SCART 'H'
A.MUTE 'H'
S2 V.IN
12VA
S1.V.OUT (FROM AVCP)
DVD/Fr V.IN
EU1 V.OUT
EU1 A.OUT.L
EU1 A.OUT.R
EU2 V.OUT
EU2 A.OUT.R
EU2 A.OUT.L
W/MOD OPTION
MUTE OPTION
Q801
KTC3875S
Q802
KTC3875S
Q803
KTC3875S
D801
1SS131
D802
1SS131
MOD.A.OUT
NOR.A.OUT (TO AVCP)
NOR.A.IN (FROM AVCP)
DVD V.IN
PB
REC
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
1
2
3
4
5
6
7
8
9
10
11

VC8806P1K's
3854R14374A

6. SCART(JACK) CIRCUIT DIAGRAM


JK903
OPTICAL
JK904
S_VHS
IN
OUT
AUDIO_R
AUDIO_L
V-IN
V_OUT
Pr
Pb
Y
DVD_A_R
DVD_A_L
COAXIAL
JK902
EU1 A.OUT.R
EU1 A.OUT.L
EU1 A.IN.L
EU1 A.IN.R
EU1 V.IN
OPTICAL
COAXIAL
DVD_A_R
DVD_A_L
A_MUTE_R
A_MUTE_L
C
Y
EU1 V.OUT
SVT
MOD V.OUT
Pr/R
Y/G
Pb/B
DVD VIDEO
C_V_OUT(DVD)
5.3VA
5.0V
RGB 'H'
GND
Q903 KTC3875
Q902 KTC3875
Q904 KTA1504
Q901 KTC3875
SW901 SWITCH
RGB OUT
SCART 'H'
EU2 V.OUT
EU2 V.IN
EU2 A.OUT.L
EU2 A.IN.L
EU2 A.IN.R
C+ DET 'H'
EU2 A.OUT.R
GND
SC901
SCART JACK
A B C D E F G H I J K L M N O P
1 2 3 4 5 6 7 8 9 10 11

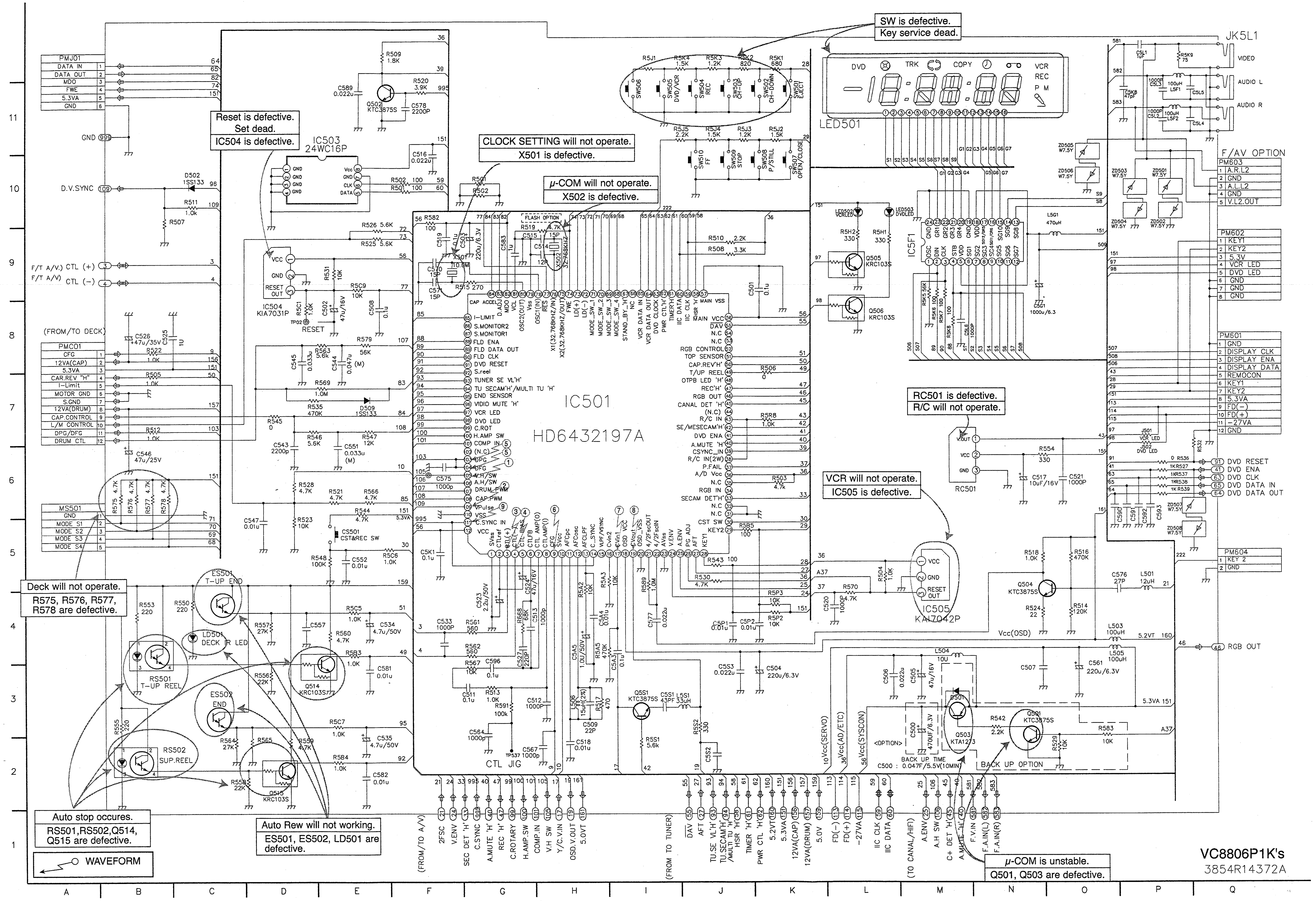
OPTION	RGB ONLY (W/ SCART, W/O COMPONENT)	COMPONENT OPTION (W/ COMPONENT PAL-W MODEL)
ADD	J902,J903,J904,J905	J906,J907,J908
DELETE	SW901,R926	SW901,R926,J905 R919,R920,R903,Q901

OPTION : RCA MODEL : 0ohm
SCART MODEL : 1k

SCART Pin connwction
1.Audio output2
2. Audio input2(R)
3. Audio output1(L)
4. Audio earth
5. Blude earth
6. Audio input1(L)
7. Blue signal
8. Switching voltage
9. Green earth
10. Data2
11. Green signal
12. Data1
13. Red earth
14. Data earth
15. Red signal
16. Blanking signal
17. Video earth
18. Blanking signal earth
19.Video output
20. Video input
21. Plug screen earth

VC8806P1K's
3854R14376A

7. SYSTEM CIRCUIT DIAGRAM



SW is defective.
Key service dead.

Reset is defective.
Set dead.
IC504 is defective.

CLOCK SETTING will not operate.
X501 is defective.

μ-COM will not operate.
X502 is defective.

RC501 is defective.
R/C will not operate.

VCR will not operate.
IC505 is defective.

Deck will not operate.
R575, R576, R577, R578 are defective.

Auto stop occures.
RS501,RS502,Q514, Q515 are defective.

Auto Rew will not working.
ES501, ES502, LD501 are defective.

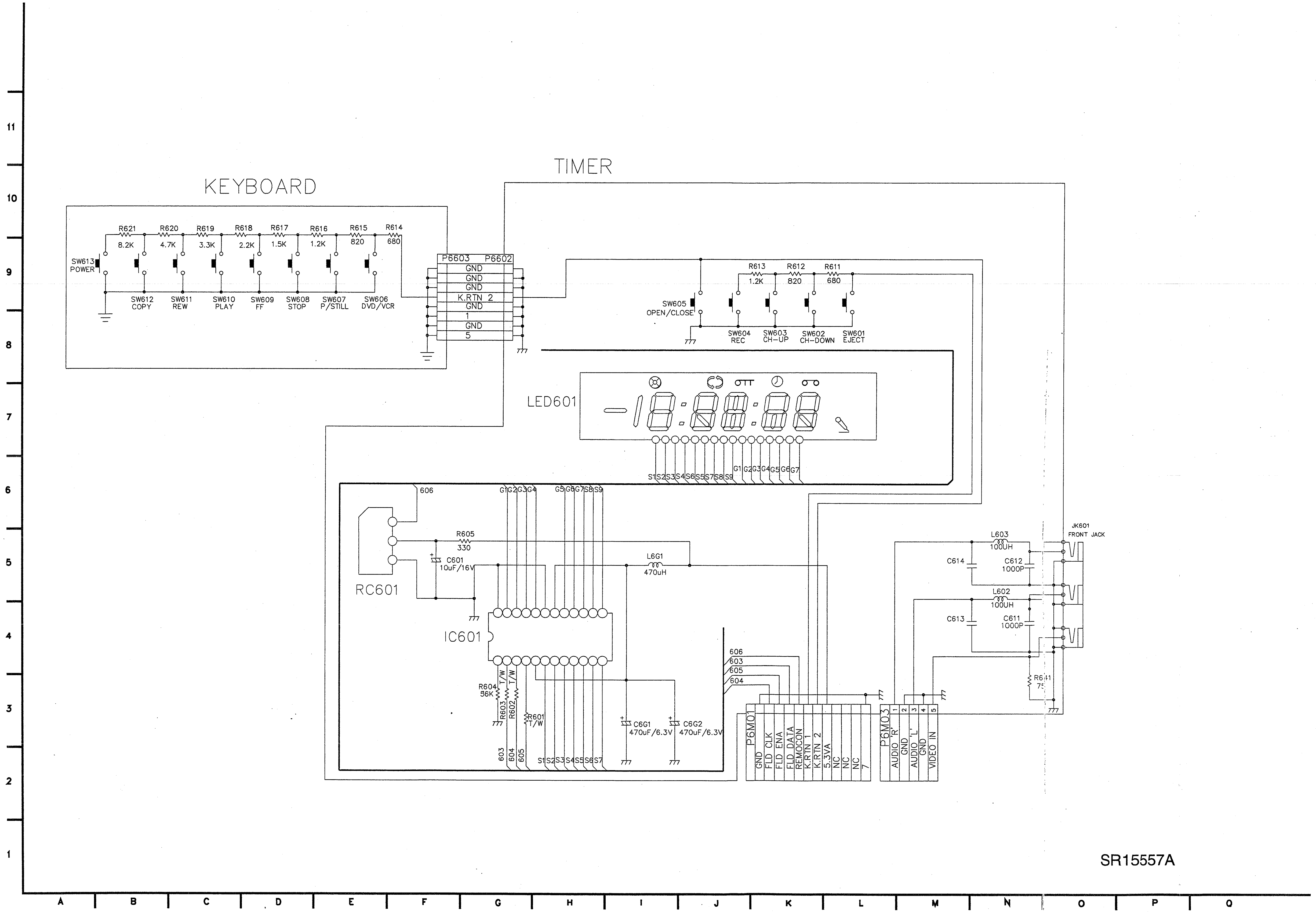
μ-COM is unstable.
Q501, Q503 are defective.

WAVEFORM

VC8806P1K's
3854R14372A

IC501
HD6432197A
IC503
24WC16P
IC504
KIA7031P
IC505
KIA7042P
IC5F1
LED501
JK5L1
VIDEO
AUDIO L
AUDIO R
F/AV OPTION
PM603
PM602
PM601
PM604
PMJ01
PMC01
MS501
RC501
Q502 KTC3875S
Q505 KRC103S
Q506 KRC103S
Q504 KTC3875S
Q5S1 KTC3875S
Q501 KTC3875S
Q503 KTA1273
Q514 KRC103S
Q515 KRC103S
ES501 T-UP END
ES502 END
LD501 DECK IR LED
RS501 T-UP REEL
RS502 SUP.REEL
SW506
SW505 DVD/VCR
SW504 REC
SW503 CH-UP
SW502 CH-DOWN
SW501 EJECT
SW510 FF
SW509 STOP
SW508 P/STILL
SW507 OPEN/CLOSE
DVD TRK COPY VCR REC P M
DVD RESET
DVD ENA
DVD CLK
DVD DATA IN
DVD DATA OUT
RGB OUT
BACK UP OPTION
BACK UP TIME
C500 : 0.047F/5.5V(10MIN)
CTL JIG
(FROM/TO DECK)
(FROM/TO A/V)
(FROM TO TUNER)
(TO CANAL/HIFI)
GND
D.V.SYNC
F/T A/V.) CTL (+)
F/T A/V) CTL (−)
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
1
2
3
4
5
6
7
8
9
10
11

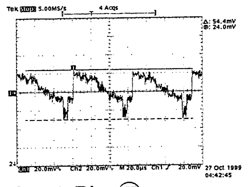
8. TIMER CIRCUIT DIAGRAM

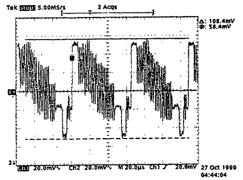


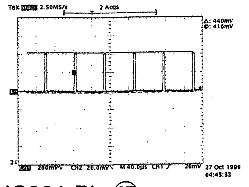
KEYBOARD
TIMER
R621 8.2K
R620 4.7K
R619 3.3K
R618 2.2K
R617 1.5K
R616 1.2K
R615 820
R614 680
SW613 POWER
SW612 COPY
SW611 REW
SW610 PLAY
SW609 FF
SW608 STOP
SW607 P/STILL
SW606 DVD/VCR
P6603
P6602
GND
GND
GND
K.RTN 2
GND
1
GND
5
R613 1.2K
R612 820
R611 680
SW605 OPEN/CLOSE
SW604 REC
SW603 CH-UP
SW602 CH-DOWN
SW601 EJECT
LED601
S1 S2 S3 S4 S6 S5 S7 S8 S9 G1 G2 G3 G4 G5 G6 G7
606
G1 G2 G3 G4
G5 G6 G7 S8 S9
R605 330
C601 10uF/16V
L6G1 470uH
RC601
IC601
R604 56K
T/W
T/W
R603
R602
R601 T/W
603
604
605
S1 S2 S3 S4 S5 S6 S7
C6G1 470uF/6.3V
C6G2 470uF/6.3V
606
603
605
604
P6M01
GND
FLD CLK
FLD ENA
FLD DATA
REMOCON
K.RTN 1
K.RTN 2
5.3VA
NC
NC
NC
7
P6M03
1
2
3
4
5
AUDIO 'R'
GND
AUDIO 'L'
GND
VIDEO IN
L603 100UH
C614
C612 1000P
L602 100UH
C613
C611 1000P
R641 75
JK601 FRONT JACK
SR15557A
1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q

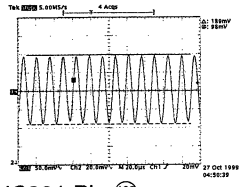
WAVEFORM & VOLTAGE SHEET

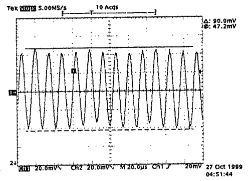
★ IC301 Oscilloscope Waveform

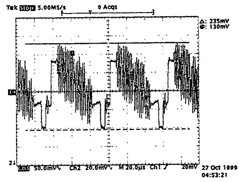
①

IC301 Pin (75)
PB mode
500mvp-p

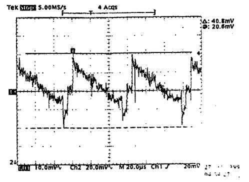
②

IC301 Pins ㊽,㊿, (52)
(54), (56)
Video in 1Vp-p

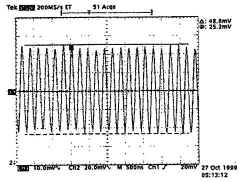
③

IC301 Pin (67)
PB/REC mode
4.0Vp-p

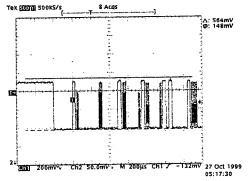
④

IC301 Pin (100)
REC mode
1.1Vp-p

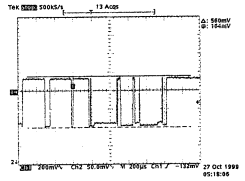
⑤

IC301 Pin ③
REC mode
2.0Vp-p

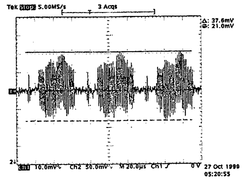
⑥

IC301 Pin (65)
PB mode
2.02Vp-p

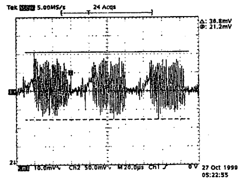
⑦

IC301 Pin ㊸
PB mode
400mVp-p

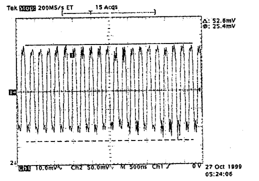
⑧

IC301 Pin ㉘
PB mode
400mVp-p

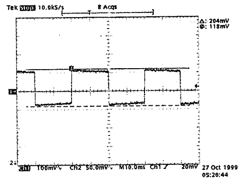
⑨

IC301 Pin (68)
PB/REC mode
5Vp-p

⑩

IC301 Pin (69)
PB/REC mode
5Vp-p

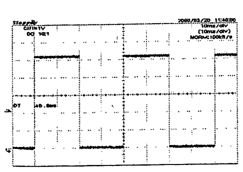
⑪

IC301 Pins ㉑
REC mode
340mVp-p

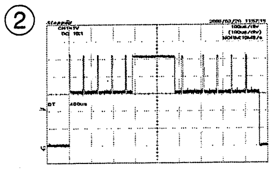
⑫

IC301 Pins ㉕
PB mode
300mVp-p

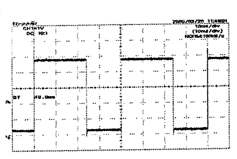
⑬

IC301 Pin ㉙
PB mode
400mVp-p

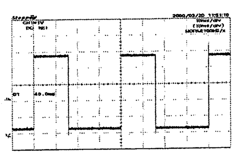
⑭

IC301 Pin (70)
PB mode
3.6Vp-p

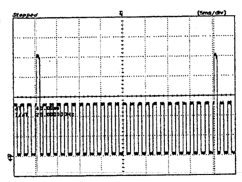
★ IC501 Waveform Photographs

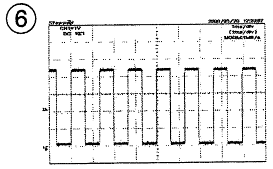
①

V.HSW
(IC501 Pin 105)
1V/10mS
REC/PB MODE

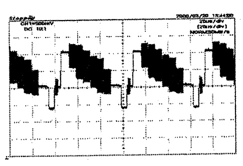
②

DV.SYNC
(IC501 PIN 109)
1V/100uS
QUE/REV MODE

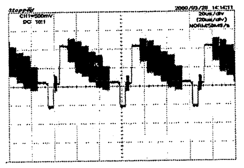
③

CTL(+)
(IC501 Pin 3)
1V/10mS

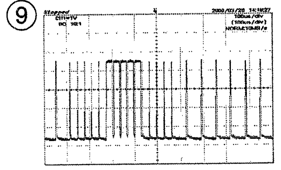
④

CTL(-)
(IC501 Pin4)
1V/10mS

⑤

DFG/DFG
(IC501 PIN 103,104)
1V/10mS
REC/PB MODE

⑥

CFG
(IC501 Pin9)
1V/10mS

⑦

V.IN
(IC501 Pin 17)
500mV/20uS

⑧

V.OUT
(IC501 Pin 19)
500mV/20uS
EE/PB MODE

⑨

C.SYNC
(IC501 Pin 111)
1.0V/100uS
EE/PB MODE

• CIRCUIT VOLTAGE CHART

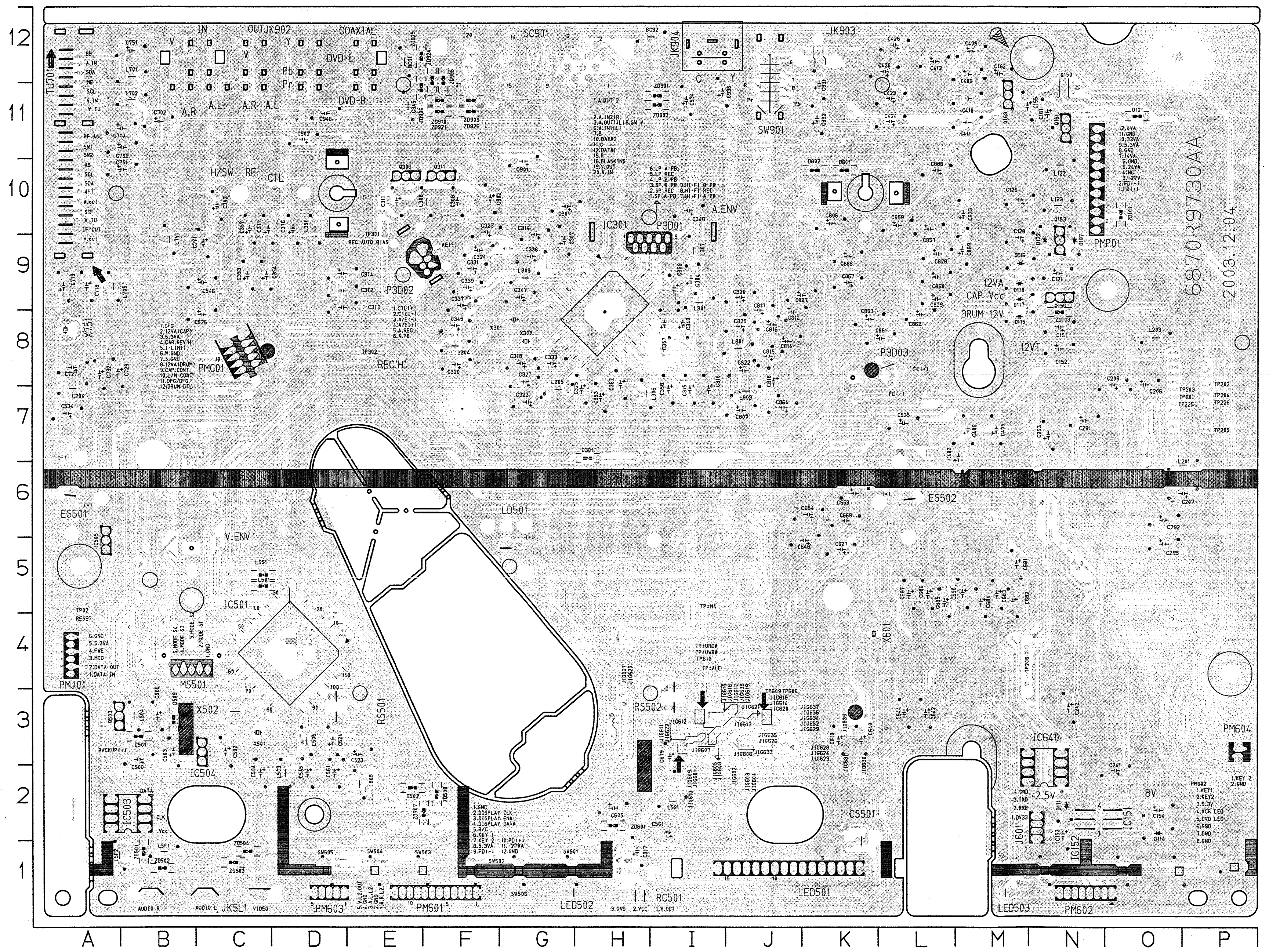
MODE PIN NO.	EE	PB	REC
IC201			
1	2.36 V	2.35 V	2.32 V
2	2.4 V	2.35 V	2.4 V
3	3.5 V	3.49 V	3.5 V
4	2.43 V	2.41 V	2.38 V
5	0.002 V	0.005 V	0.006 V
6	0.4 V	3.7 V	0.39 V
7	0.003 V	0.003 V	0.003 V
8	0.003 V	0.003 V	0.003 V
9	2.87 V	2.85 V	2.81 V
10	2.36 V	2.35V	2.32 V
11	3.16 V	3.13 V	3 V
12	3 V	1.7 V	3.03 V
13	4 V	4 V	4 V
14	2.3 V	2.3 V	2.25 V
15	2.98 V	1.78 V	2.93 V
16	3.2 V	3.2 V	3.2 V
17	0.15 V	3.86 V	0.017 V
18	0.124 V	3.38 V	0.127 V
19	2.23 V	2.23 V	2.23 V
20	3 V	3.3 V	3.3 V
21	1.84 V	2.34 V	2.35 V
22	4.71 V	0.002 V	0.007 V
23	4.72 V	4.69 V	4.64 V
24	4.72 V	4.69 V	4.63 V
25	2.37 V	2.26 V	2.37 V
26	2.37 V	2.25 V	2.36 V
27	3 V	2.86 V	3 V
28	0.182 V	0.187 V	0.182 V
29	0.46 V	0.62 V	0.85 V
30	1.95 V	1.94 V	1.91 V
IC301			
1	4.8 V	4.84 V	0.99 V
2	0.11 V	0.014 V	0.81 V
3	2.16 V	2.16 V	2.03 V
4	0.69 V	0.63 V	1.73 V
5	2.15 V	2.15 V	2.26 V
6	2.16 V	2.15 V	2.06 V
7	2.15 V	2.15 V	2.1 V
8	2.15 V	2.15 V	2.1 V
9	2.14 V	2.14 V	2.73 V
10	2.16 V	2.16 V	2.66 V
11	2.23 V	2.27 V	2.8 V
12	1.56 V	0.002 V	2.0 V
13	2.14 V	2.14 V	0.095 V
14	0.022 V	0.022 V	2.05 V
15	2.14 V	2.14 V	2.08 V
16	4.85 V	0.146 V	4.68 V
17	2.14 V	2.14 V	2.09 V
18	4.8 V	4.86 V	4.73 V
19	3.88 V	3.92 V	2.72 V
20	2.31 V	0.003 V	0.006 V
21	3 V	1.68 V	3.02 V
22	3.2 V	2.62 V	3.2 V
23	3.2 V	2.55 V	3.2 V
24	4.85 V	4.85 V	4.75 V
25	0.121 V	3.4 V	0.19 V
26	1.65 V	1.25 V	1.6 V
27	2.16 V	2.1 V	2.14 V
28	3.75 V	3.7 V	3.66 V
29	2.43 V	2.46 V	2.34 V
30	0.002 V	0.002 V	0.005 V
31	4.76 V	4.58 V	4.72 V
32	4.68 V	4.58 V	4.71 V
33	2.88 V	2.86 V	2.8 V
34	0.061 V	0.06 V	0.061 V
35	3.02 V	2.34 V	2.99 V
36	3.5 V	2.84 V	3.4 V
37	1.7 V	1.76V	1.61 V
38	2 V	2.05 V	1.94 V
39	8.65 V	8.6 V	8.38 V
40	0.002 V	0.003 V	0.006 V
41	0.002 V	0.003 V	0.006 V
42	4.8 V	4.8 V	4.68 V
43	2.4 V	2.67 V	2.17 V
44	13.8 mV	3.86 V	0.03 V
45	2.5 V	2.52 V	2.55 V
46	2.6 V	2.78 V	2.64 V
47	4.14 V	4.14 V	4.14 V
48	3.3 V	3.09 V	3.30 V
49	2.97 V	2.93 V	3.69 V
50	1.93 V	1.92 V	1.92 V
51	0.002 V	0.003 V	0.005 V
52	1.93 V	1.93 V	1.92 V
53	2.33 V	2.33 V	2.34 V
54	1.93 V	1.92 V	1.92 V
55	5.14 V	5.14 V	5.13 V
56	2.24 V	2.57 V	2.22 V
57	1.95 V	2.28 V	0.006 V
58	3 V	2.55 V	3.01 V
59	2.9 V	2.93 V	2.92 V
60	1.47 V	1.54 V	1.48 V
61	1.8 V	2.44 V	1.79 V
62	0.087 V	0.09 V	0.088 V
63	1.8 V	2.55 V	1.78 V
64	0.002 V	0.003 V	0.006 V
65	1.71 V	0.002 V	1.69 V
66	0.002 V	0.003 V	0.006 V
67	0.005 V	0.07 V	0.44 V
68	4.8 V	4.8 V	4.78 V
69	4.7 V	4.7 V	4.7 V
70	7.75 V	2.55 V	5.55 V
71	5.55 V	0.008 V	0.008 V
72	4.84 V	4.8 V	4.72 V
73	2.21 V	2.2 V	2.24 V
74	2.45 V	2.6 V	2.43 V
75	2.38 V	0.72 V	2.38 V
76	2.4 V	0.81 V	2.39 V
77	1.58 V	1.6 V	1.48 V
78	2.44 V	3.35 V	2.33 V
79	1.73 V	1.67 V	2.51 V
80	0.98 V	0.98 V	4.46 V
81	1.1 V	1.13 V	1.15 V
82	0.003 V	0.004 V	0.006 V
83	1.65 V	1.03 V	1.41 V
84	0.258 V	2.5 V	0.014 V
85	0.002 V	0.003 V	1.38 V
86	0.251 V	0.014 V	1.98 V
87	0.77 V	0.78 V	0.78 V
88	0.77 V	0.78 V	0.77 V
89	0.77 V	0.78 V	0.77 V
90	0.77 V	0.78 V	0.77 V
91	4.85 V	4.83 V	4.74 V
92	2.1 mV	0.004 V	0.006 V
93	1.7 V	1.72 V	3.94 V
94	1.7 V	1.71 V	3.93 V
95	1.7 V	1.71 V	3.92 V
96	1.7 V	1.71 V	3.94 V
97	0.002 V	0.005 V	0.006 V
98	2.16 V	2.16 V	2.21 V
99	2.16V	2.16 V	2.25 V
100	2.16 V	2.16 V	2.31 V
IC5F1			
1	2.33 V	2.31 V	2.3 V
2	4.98 V	4.9 V	4.9 V
3	5 V	5 V	5 V
4	4.96 V	4.9 V	4.9 V
5	4.89 V	4.85 V	4.8 V
6	0.64 V	0.59 V	0.6 V
7	0.64 V	0.59 V	0.6 V
8	0.64 V	0.61 V	0.6 V
9	0.73 V	0.93 V	0.96 V
10	1 V	0.92 V	0.91 V
11	0.72 V	0.63 V	0.92 V
12	1.83 V	1.84 V	1.8 V
13	0.73 V	0.75 V	0.72 V
14	1.26 V	1.22 V	1.2 V
15	1.26 V	1.23 V	1.1 V
16	1.65 V	1.63 V	1.54 V
17	1.58 V	1.58 V	1.42 V
18	4.89 V	4.8 V	4.8 V
19	0.002 V	0.003 V	0.003 V
20	1.75 V	1.63 V	1.5 V
21	1.7 V	1.7 V	1.5 V
22	1.78 V	1.71 V	1.5 V
23	1.73 V	1.6 V	1.41 V
24	0.002 V	0.003 V	0.003 V
IC751			
1	5.1 V	5.1 V	5.08 V
2	1.5 V	1.5 V	1.51 V
3	1.5 V	1.5 V	1.5 V
4	0.002 V	0.003 V	0.003 V
5	2.5 V	2.46 V	2.46 V
6	2.44 V	2. 44 V	2.43 V
7	1.84 V	1.89 V	2.06 V
8	1.86 V	0.004 V	0.004 V
9	1.86 V	0.004 V	0.004 V
10	0.002 V	0.003 V	0.003 V
11	5.12 V	5.12 V	5.11 V
12	4.8 V	4.8 V	4.8 V
13	4.7 V	4.75 V	4.7 V
14	1.75V	2.6 V	2.59 V
15	1.77 V	2.6 V	2.6 V
16	1.77 V	5 V	5 V
17	1.75 V	1.5 V	2.06 V
18	1.75 V	1.5 V	2 V
19	5 V	5 V	5 V
20	0.003 V	0.003 V	0.003 V
21	1.88 V	1.58 V	2 V
22	5.1 V	5.1 V	5.11 V
23	0.002 V	0.005 V	0.004 V
24	0.002 V	0.005 V	0.005 V
25	0.002 V	0.003 V	0.003 V
26	0.05 V	0.051 V	0.051 V
27	0.05 V	0.05 V	0.05 V
28	0.002 V	0.003 V	0.005 V
29	0.002 V	0.003 V	0.003 V
30	2.78 V	2.77 V	2.76 V
31	2.78 V	1.9 V	2.76 V
32	0.002 V	0.003 V	0.005 V
33	5.1 V	5.09 V	5.08 V
34	4.06 V	4.08 V	4.06 V
35	0.003 V	0.003 V	0.003 V
36	2.77 V	2.76 V	2.76 V
37	0.002 V	0.002 V	0.002 V
38	0.002 V	0.003 V	0.002 V
39	0.002 V	0.003 V	0.002 V
40	2.76 V	2.75 V	2.75 V
41	2.76 V	2.75 V	2.75 V
42	2.59 V	2.59 V	2.6 V
43	2.35 V	2.35 V	2.35 V
44	0.003 V	0.003 V	0.003 V
IC501			
1	0.002 V	0.002 V	0.002 V
2	2.56 V	2.55 V	2.55 V
3	2.56 V	2.55 V	2.9 V
4	2.56 V	2.55 V	2 V
5	2.56 V	2.55 V	2.55 V
6	2.56 V	2.56 V	2.55 V
7	2.64 V	2.63 V	2.6 V
8	2.54 V	2.53 V	2.52 V
9	0.064 V	2.27 V	2.26 V
10	5.13 V	5.12 V	5.11 V
11	1.69 V	1.68 V	1.66 V
12	1.7 V	1.7 V	1.67 V
13	2.32 V	2 V	2.3 V
14	0.48 V	0.08 V	0.53 V
15	1.28 V	1.29 V	1.36 V
16	1.84 V	1.83 V	1,8 V
17	2.32 V	3 V	2.26 V
18	4.7 V	4,7 V	4.6 V
19	2.19 V	3 V	2.13 V
20	0.01 V	0.009 V	0.01 V
21	2.2 V	2.2 V	2.16 V
22	2.32 V	2.3 V	2.26 V
23	0.01 V	0.009 V	0.01 V
24	0.3 V	2.84 V	0.012 V
25	0.08 V	3.4 V	0.068 V
26	5.14 V	5.13 V	5.12 V
27	4.2 V	4.16 v	3.93 V
28	5.13 V	5.13 V	5.11 V
29	5.13 V	5.13 V	5.11 V
30	0.004 V	0.002 V	0.003 V
31	0.002 V	0.002 V	0.002 V
32	0.002 V	0.002 V	0.002 V
33	0.18 V	0.18 V	0.18 V
34	1.37 V	1.3 V	1.42 V
35	5.14 V	5.13 V	5.1 V
36	5.14 V	5.13 V	5.1 V
37	4.74 V	4.73 V	4.7 V
38	4.74 V	4.75 V	4.7 V
39	2.45 V	4.9 V	2.33V
40	5 V	0.003 V	4.96 V
41	2.28 V	1.55 V	1.42 V
42	0.003 V	0.003 V	0.004 V
43	4.76 V	4.75 V	4.73 V
44	0.003 V	0.003 V	0.004 V
45	(-)0.001 V	(-)0.001 V	(-)0.001 V
46	0.003 V	0.003 V	0.004 V
47	0.003 V	0.003 V	5 V
48	0.003 V	0.003 V	0.004 V
49	5.14 V	0~5 V	0.005~5 V
50	5.1 V	0.003 V	0.004 V
51	4.38 V	0.03 V	0.035 V
52	0.031 V	5.06 V	0.038 V
53	0.003 V	0.003 V	0.004 V
54	5.1 V	5 V	5 V
55	5.1 V	5.13 V	5.11 V
56	5.1 V	5,1 V	5.1 V
57	0.002 V	0.002 V	0.002 V
58	0.003 V	0.004 V	0.004 V
59	4.8 V	4.8 V	4.8 V
60	4.7 V	4.7 V	4.9 V
61	4.7 V	5 V	5 V
62	5 V	5 V	5 V
63	1.8 V	1.3 V	1.68 V
64	5.1 V	5 V	5 V
65	1.78 V	5.1 V	1.66 V
66	5.1 V	5.1 V	5.08 V
67	0.004 V	4.4 V	5.08 V
68	0.001 V	5.1 V	0.005 V
69	0.001 V	5.1 V	5.12 V
70	5.14 V	5.1 V	5.12 V
71	5.14 V	0.001 V	0.001 V
72	0.028 V	0.028 V	0.029 V
73	5 V	5.1 V	5.04 V
74	0.001 V	0.001 V	0.002 V
75	1.5 V	1.93 V	1.48 V
76	1.7 V	2.02 V	1.44 V
77	5.1 V	5.1 V	5.08 V
78	2.5 V	2.51 V	2.52 V
79	0.001 V	0.002 V	0.002 V
80	2.53 V	2.5 V	2.5 V
81	3.2 V	3.2 V	3.19 V
82	5.12 V	5.1 V	5.1 V
83	0.172 V	2.68 V	2.55 V
84	0.004 V	2.4 V	2.69 V
85	0.019 V	3.4 V	3.44 V
86	2.55 V	2.55 V	2.56 V
87	5.11 V	3.1 V	2.29 V
88	5.11 V	4.95 V	4.9 V
89	5.11 V	4.97 V	4.9 V
90	5.11 V	5 V	4.98 V
91	5.11 V	5.1 V	5.09 V
92	5.12 V	0.008~0.05 V	0.006 V
93	0.005 V	0.005 V	0.006 V
94	0.005 V	0.005 V	0.013 V
95	4.38 V	0.05 V	0.012 V
96	0.005 V	0.005 V	0.006 V
97	5.11 V	5.1 V	5.09 V
98	0.005 V	5.3 V	0.006 V
99	5.11 V	2.55 V	2.52 V
100	0.005 V	0.005 V	0.006 V
101	1.51 V	2.6 V	1.31 V
102	0.005 V	0.006 V	0.006 V
103	0.099 V	1.36 V	1.38 V
104	0.099 V	1.36 V	1.36 V
105	5.11 V	2.55 V	2.53 V
106	0.005 V	2.54 V	2.53 V
107	0.005 V	2.75 V	2.75 V
108	0.005 V	2.81 V	2.79 V
109	0.049 V	50.6 V	0.05 V
110	0.002 V	0.002 V	0.002 V
111	0.48 V	0.6 V	0.55 V
112	5.12 V	5.11 V	5.1 V
IC801			
1	3.8 V	3.81 V	3.82 V
2	3.8 V	3.82 V	3.82 V
3	3.8 V	3.82 V	3.82 V
4	3.8 V	3.82 V	3.82 V
5	3.8 V	3.82 V	3.82 V
6	3.8 V	3.82 V	3.82 V
7	3.8 V	3.82 V	3.82 V
8	3.8 V	3.82 V	3.82 V
9	3.8 V	3.82 V	3.82 V
10	3.8 V	3.82 V	3.82 V
11	3.8 V	3.82 V	3.82 V
12	0.054 V	~	0.048 V
13	3.87 V	3.8 V	3.99 V
14	0.008 V	0.003 V	0.011 V
15	0.008 V	0.006 V	0.01 V
16	6 V	6.07 V	6.07 V
17	6 V	6.07 V	6.08 V
18	7 V	6.07 V	0.11 V
19	6 V	6.06 V	0.028V
20	6 V	6.07 V	6.07 V
21	4.58 V	4.57 V	5.9 V
22	3.82 V	3.82 V	3.82 V
23	3.86 V	3.84 V	3.86 V
24	3.87 V	3.84 V	3.87 V
25	3.87 V	3.9 V	3.87 V
26	0.76 V	0.003 V	0.76 V
27	0.001 V	0.003 V	0.005 V
28	3.84 V	3.83 V	3.83 V
29	3.86 V	3.86 V	3.86 V
30	0.77 V	0.76V	0.76 V
31	3.87 V	3.87 V	3.86 V
32	3.86 V	3.87 V	3.87 V
33	3.86 V	3.86 V	3.86 V
34	11.84 V	11.76 V	11.77 V
35	0.64 V	0.44 V	4.3 V
36	0.64 V	0.62 V	4.3 V
37	0.64 V	0.63 V	4.28 V
38	0.005 V	0.008 V	4.32 V
39	0.002 V	0.005 V	0.006 V
40	5 V	5.07 V	5.05 V
41	0.005 V	0.92 V	0.92 V
42	4.7 V	4.7 V	4.7 V
43	4.8 V	4.8 V	4.8 V
44	0.078 V	3.3 V	0.068 V
IC802			
1	3 V	2.93 V	3.05 V
2	11.8 V	11.76 V	11.76 V
3	2.74 V	2.74 V	2.74 V
4	11.8 V	11.75 V	11.76 V
5	2.74 V	2.75 V	2.75 V
6	5.5V	5.5 V	5.5 V
7	5.6 V	5.56 V	5.57 V
8	5.5 V	5.5 V	5.49 V
9	5 V	0.006 V	4.97 V
10	5.5 V	5.5 V	5.5 V
11	11.23 V	11.15 V	11.16 V
12	5.5 V	5.5 V	5.5 V
13	0.008 V	0.01 V	0.009 V
14	5.54 V	5.5 V	5.5 V
15	0.008 V	0.009 V	0.009 V
16	5.5 V	5.5 V	5.51 V
17	0.002 V	0.003 V	0.005 V
18	0.002 V	0.005 V	0.004 V
19	(-)0.001 V	0.001 V	0.001 V
20	5.5 V	5.5 V	5.51 V
21	5.6 V	5.59 V	5.59 V
22	5.6 V	5.59 V	5.59 V
23	5.6 V	5.51 V	5.52 V
24	5.54 V	5.5 V	5.5 V

MODE PIN NO.	EE	PB	REC
25	5.6 V	5.58 V	5.59 V
26	5.6 V	5.58 V	5.59 V
27	5.54 V	5.5 V	5.5 V
28	4.16 V	4.32 V	4.51 V
29	1.46 V	1.46 V	1.46 V
30	2.1 V	1.99 V	2.07 V
31	1.35 V	1.35 V	1.35 V
32	4.7 V	4.7 V	4.7 V
33	4.8 V	4.8 V	4.8 V
34	(-) 0.002 V	0.001 V	0.000 V

PIN	EE	PB	REC
Q301			
BASE	0.01 V	0.013 V	0.79 V
EMITER	0.003 V	0.004 V	0.005 V
COLECTOR	4.83 V	4.82 V	1.02 V
Q302			
BASE	4.85 V	4.18 V	4.75 V
EMITER	0.002 V	4.85 V	4.75 V
COLECTOR	(-)2.79 V	4.8 V	(-)25.5 V
Q303			
BASE	(-)2.76 V	0.7 V	(-)25.6 V
EMITER	(-)0.8 V	0.007 V	(-)19.13 V
COLECTOR	0.002 V	0.012 V	0.004 V
Q304			
BASE	(-)2.62 V	0.72 V	(-)25.4 V
EMITER	0.002 V	0.002 V	(-)19.4 V
COLECTOR	0.002 V	0.004 V	0.004 V
Q305			
BASE	1.71 V	1.41 V	1.7 V
EMITER	2.41 V	2.1 V	2.39 V
COLECTOR	0.003 V	0.004 V	0.005 V
Q309			
BASE	2.18 V	2.01 V	2.33 V
EMITER	2.87 V	2.7 V	3 V
COLECTOR	0.012 V	0.005 V	0.012 V
Q501			
BASE	0.69 V	0.69 V	0.69 V
EMITER	0.002 V	0.003 V	0.003 V
COLECTOR	0.02 V	0.012 V	0.023 V
Q502			
BASE	0.31 V	0.38 V	0.33 V
EMITER	0.004 V	0.004 V	0.004 V
COLECTOR	2.65 V	1.93 V	2.4 V
Q504			
BASE	0.59 V	0.51 V	0.50 V
EMITER	0.03 V	0.03 V	0.03 V
COLECTOR	3.78 V	3.75 V	3.71 V
Q5S1			
BASE	0.006 V	0.005 V	0.003 V
EMITER	1.77 V	1.8 V	1.89 V
COLECTOR	2.41 V	2.1 V	2.4 V
Q515			
BASE	4.94 V	0.5~4.3 V	0.4~4.9 V
EMITER	0.002 V	0.003 V	0.005 V
COLECTOR	0.02 V	0.2~3.5 V	0.4~4.9 V
Q514			
BASE	4.96 V	0.8~4.2 V	0.2~4.3 V
EMITER	0.002 V	0.002 V	0.003 V
COLECTOR	0.02 V	0.01~4.8V	0.011 V
Q7S1			
BASE	0.007 V	0.007 V	0.008 V
EMITER	0.001 V	0.001 V	0.001 V
COLECTOR	3.7 V	3.5 V	0.057 V
Q801			
BASE	0.7 V	(-)0.1 V	0.01 V
EMITER	0.001 V	0.003 V	0.001 V
COLECTOR	0.004 V	~	0.006 V
Q802			
BASE	0.7 V	(-)0.12 V	0.7 V
EMITER	0.001 V	0.001 V	0.001 V
COLECTOR	0.004 V	0.02 V	0.005 V
Q804			
BASE	1.81 V	2.5 V	1.79 V
EMITER	2.5 V	3.20V	2.48 V
COLECTOR	0.002 V	0 V	0 V
Q901			
BASE	0.005 V	0.005 V	0.006 V
EMITER	0.003 V	2.04 V	1.9 V
COLECTOR	0.003 V	0.004 V	0.005 V
Q902			
BASE	(-)1.64 V	(-)1.69 V	(-)1.79 V
EMITER	0.003 V	0.004 V	0.004 V
COLECTOR	0.004 V	0.004 V	0.005 V
Q903			
BASE	(-)1.74 V	(-)1.63 V	(-)1.8 V
EMITER	0.003 V	0.003 V	0.005 V
COLECTOR	0.003 V	0.004 V	0.005 V

PRINTED CIRCUIT DIAGRAMS

1. MAIN P.C.BOARD (VCR+DVD)_SOLDER SIDE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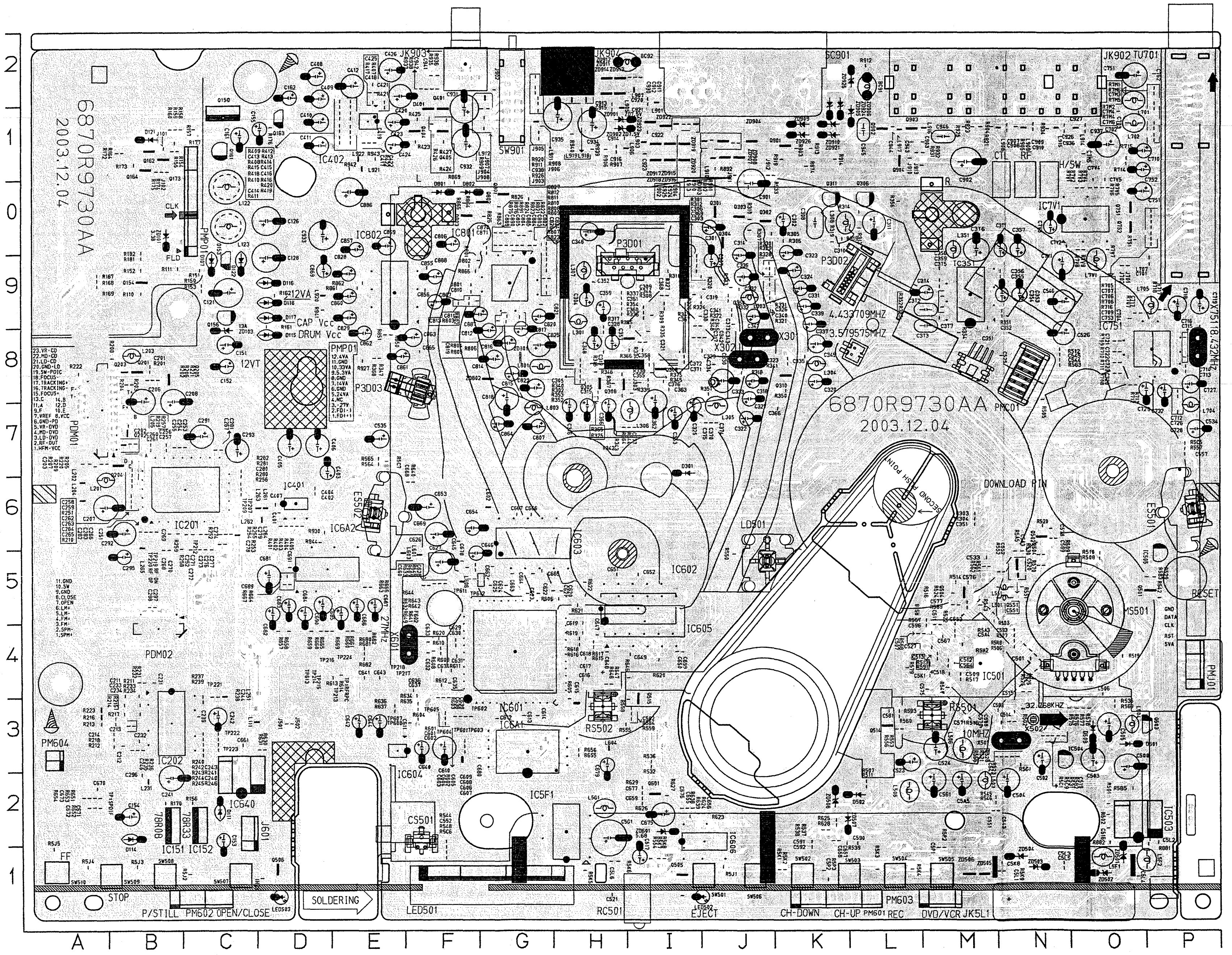
JK902
COAXIAL
SC901
JK904
JK903
SW901
IC301
P3001
P3002
P3D03
PMC01
PMP01
X751
E5501
E5502
LD501
V.ENV
IC501
MS501
X502
IC504
R5501
RS502
X601
IC640
IC503
PMJ01
PM604
CS501
LED501
LED502
LED503
RC501
PM601
PM602
PM603
JK5L1
6870R9730AA
2003.12.04
A.ENV
REC"H"
12VA
CAP Vcc
DRUM 12V
12VT
2.5V
8V
H/SW
RF
CTL
DVD-L
DVD-R

LOCATION GUIDE

H/SW±TP	C10	PIN0244	N6	PIN0432	J5
IC301	H8	PIN0250	N6	PIN0433	J5
IC501	D4	PIN0251	N7	PIN0459	K4
JIG601	I3	PIN0299	G9	PIN0473	H4
JIG602	J2	PIN0302	G9	PIN0474	H4
JIG603	J2	PIN0303	G9	PIN0475	H4
JIG604	J2	PIN0304	G8	PIN0476	H4
JIG605	I3	PIN0306	I8	PIN0477	H4
JIG606	J3	PIN0307	I8	PIN0494	G2
JIG607	I3	PIN0309	I8	PIN0600	N6
JIG608	I3	PIN0310	I8	PIN0601	N4
JIG609	I3	PIN0311	I8	PIN0602	M6
JIG610	I3	PIN0312	I8	PIN0603	L5
JIG611	I3	PIN0315	I9	REC±TP	C6
JIG612	I3	PIN0316	I9	RF±TP	C10
JIG613	J3	PIN0319	H9	TP02	A4
JIG614	I3	PIN0327	D5	TP109	02
JIG615	I3	PIN0328	D5	TP110	I4
JIG616	I3	PIN0332	C5	TP111	I4
JIG617	I3	PIN0333	C6	TP112	N2
JIG618	I3	PIN0335	C5	TP201	07
JIG619	J3	PIN0336	C5	TP202	P8
JIG620	I3	PIN0340	C4	TP203	07
JIG621	J3	PIN0342	C5	TP204	P7
JIG622	I3	PIN0343	C5	TP205	P7
JIG623	J2	PIN0346	B5	TP206	M4
JIG624	J3	PIN0350	B4	TP225	07
JIG625	H4	PIN0351	C4	TP226	P7
JIG626	J3	PIN0352	B4	TP537	D10
JIG627	H4	PIN0353	B4	TP606	J4
JIG628	J3	PIN0354	B4	TP609	J4
JIG629	J3	PIN0360	D3	TP610	I4
JIG630	K2	PIN0363	D3	TP701	A10
JIG631	K2	PIN0364	E2	TP901	I12
JIG632	J3	PIN0365	E2	TP902	I12
JIG633	J3	PIN0366	E2	TP903	B11
JIG634	J3	PIN0367	E2	TP904	C11
JIG635	J3	PIN0368	E2	TP905	B12
JIG636	J3	PIN0369	E4	TP906	C11
JIG637	J3	PIN0370	E4	TP907	C11
JIG638	I3	PIN0372	D6	TP908	C12
JIG639	K3	PIN0411	I5	TP909	D11
PIN0010	C5	PIN0414	I5	TP910	D12
PIN0012	D4	PIN0415	I5	TP911	D12
PIN0042	H9	PIN0416	I6	TP912	D11
PIN0043	H9	PIN0417	H5	TP913	D12
PIN0054	G8	PIN0418	H4	TP914	E12
PIN0062	G9	PIN0419	H4	TP915	E11
PIN0064	H8	PIN0420	I5	TP916	F12
PIN0066	I9	PIN0421	I6	TP917	G11
PIN0071	H7	PIN0422	H4	TP918	G11
PIN0072	H8	PIN0423	H4	TP919	G11
PIN0086	C3	PIN0424	H5	TP920	H12
PIN0098	D4	PIN0425	J4	TP921	I12
PIN0105	D3	PIN0426	J5	TP922	I12
PIN0107	F2	PIN0427	J5	TP923	H12
PIN0121	H2	PIN0428	J5	TP±ALE	I4
PIN0122	G2	PIN0429	J5	TP±MA	I5
PIN0124	F2	PIN0430	J5	TP±URD#	I4
PIN0243	N6	PIN0431	J5	TP±UWR#	I4

2. MAIN P.C.BOARD (VCR+DVD)_COMPONENT SIDE



LOCATION GUIDE

BC91	L12
BC92	I12
C121	C9
C126	D10
C128	D9
C151	C8
C152	C8
C153	C2
C154	B2
C155	D11
C161	C11
C162	D12
C201	B8
C202	B7
C203	A7
C206	B8
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C291	C7
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C320	K8
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D115	D8
D116	D9
D117	D9
D118	D9
D121	B11
D122	C9
D301	I7
D401	F11
D501	O3
D502	L2
D509	O3
D801	F10
D802	F10
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ES502	E5
F602	G5
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IC202	B3
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IC401	D6
IC402	E11
IC503	P2
IC504	N3
IC505	P5
IC5F1	H2
IC601	G4
IC602	I5
IC603	G6
IC604	E3
IC605	I5
IC606	J2
IC640	D2
IC6A1	G3
IC6A2	D5
IC751	P8
IC7V1	O10
IC801	G9
IC802	E9
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J102	B11
J303	I8
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J502	D3
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J702	O9
J902	G12
J903	G11
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J905	G12
J906	G11
J907	G11
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J910	L11
J911	J11
J912	J11
J913	M11
JK5L1	N1
JK902	M12
JK903	F12
JK904	H12
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L264	C6
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L303	J9
L304	K8
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L307	H9
L308	K10
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L503	M2
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LED502	J1
LED503	D1
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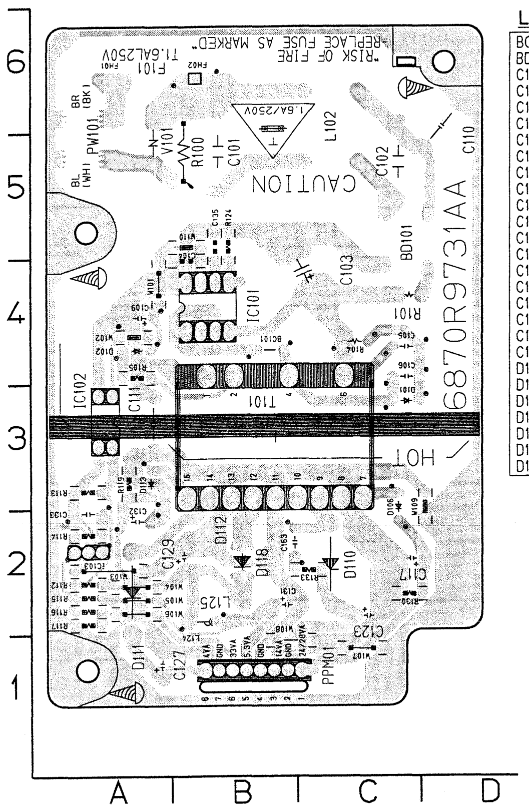
R936	F12
R937	F12
R938	F12
R939	H11
R940	H11
R941	D9
R942	E11
R943	E11
R944	D6
RC501	I1
RS501	M3
RS502	H3
SC901	K12
SW501	J1
SW502	K1
SW503	K1
SW504	L1
SW505	M1
SW506	J1
SW507	C1
SW508	B1
SW509	B1
SW510	A1
SW511	J3
SW512	J4
SW513	K4
SW514	K5
SW901	G12
TP207	C6
TP209	C6
TP212	C6
TP213	E4
TP214	D4
TP215	D4
TP216	D4
TP217	E4
TP218	E4
TP219	B6
TP220	B6
TP221	C4
TP222	C3
TP223	C3
TP224	E4
TP301	L9
TP302	L8
TP601	F3
TP602	F3
TP603	F3
TP604	F3
TP605	F3
TP607	E3
TP608	E3
TP611	F5
TP612	F5
TP613	D4
TP:RFRP	E4
TP:SPDIF	A2
TU701	P12
X301	J8
X302	J8
X501	N3
X502	N3
X601	F4
X751	P8
ZD101	B10
ZD103	C8
ZD501	O1
ZD502	O1
ZD503	N1
ZD504	N1
ZD505	M1
ZD506	M1
ZD507	K2
ZD508	K2
ZD601	I2
ZD801	G8
ZD802	G8
ZD901	H11
ZD902	H11
ZD903	J11
ZD904	J11
ZD905	K12
ZD906	L11
ZD907	J11
ZD908	J11
ZD909	K11
ZD910	K11
ZD911	H12
ZD912	H12
ZD913	H12
ZD914	H12
ZD915	I11
ZD916	I11
ZD917	I11
ZD918	I11
ZD919	I11
ZD920	I11
ZD921	K11
ZD922	I11
ZD923	I11
ZD924	K12
ZD925	L12
ZD926	K11

2. SMPS P.C.BOARD


6
5
4
3
2
1
A
B
C
D
REPLACE FUSE AS MARKED
RISK OF FIRE
T1.6AL250V
F101
FH01
FH02
T1.6A/250V
PW101
BR (BK)
BL (WH)
V101
R100
C101
L102
C102
C110
CAUTION
BD101
C103
IC101
R101
6870R9731AA
T101
HOT
IC102
C111
D112
D118
D110
C129
L125
C117
C123
D111
C127
PPM01

LOCATION GUIDE

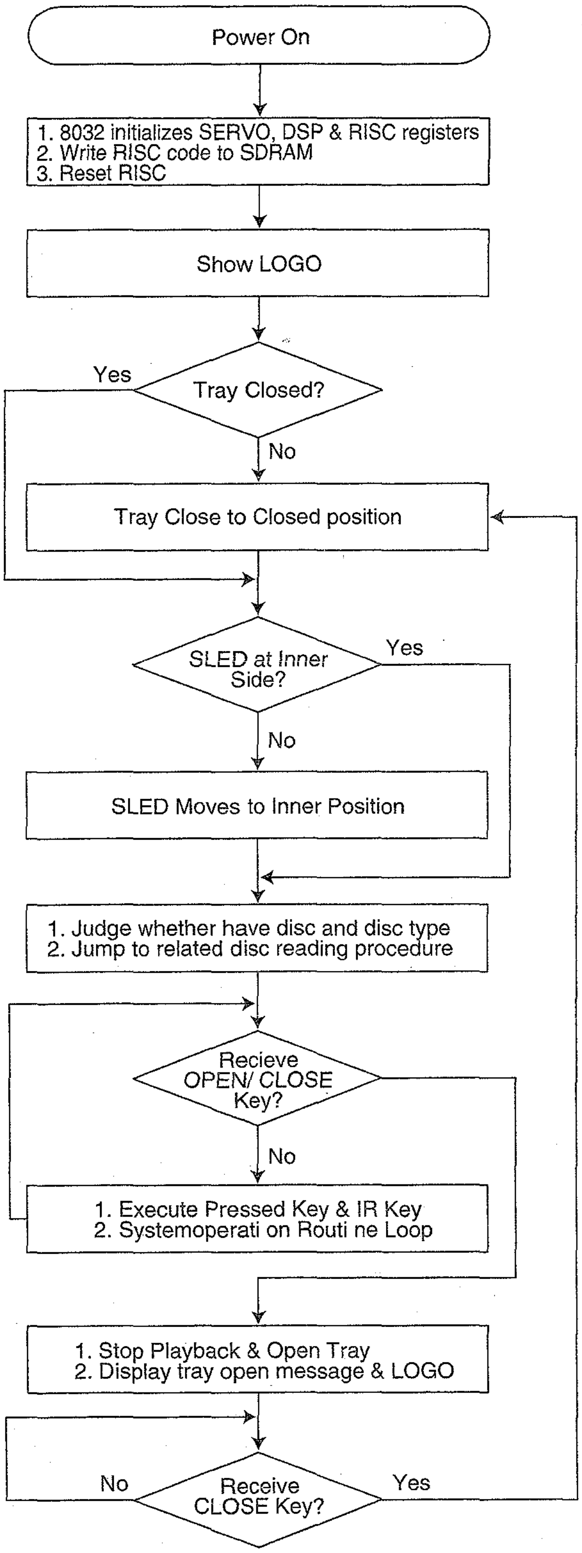
BC101	B4	D118	B2
BD101	C5	FH01	A6
C101	B5	FH02	B6
C102	C5	IC101	B4
C103	C4	IC102	A3
C104	B4	IC103	A2
C105	C4	L102	C6
C106	C4	L124	B2
C109	A4	L125	B2
C110	D6	PPM01	C1
C111	A3	PW101	A5
C117	C2	R100	B5
C123	C2	R101	C4
C127	A1	R104	C4
C129	B2	R105	A4
C131	B2	R112	A2
C132	A2	R113	A3
C133	A2	R114	A2
C135	B5	R115	A2
C163	B2	R116	A2
D101	C3	R117	A2
D102	A4	R119	A3
D106	C3	R124	B5
D110	C2	R130	C2
D111	A2	R133	C2
D112	B2	T101	B3
D113	A3	V101	A5

MEMO

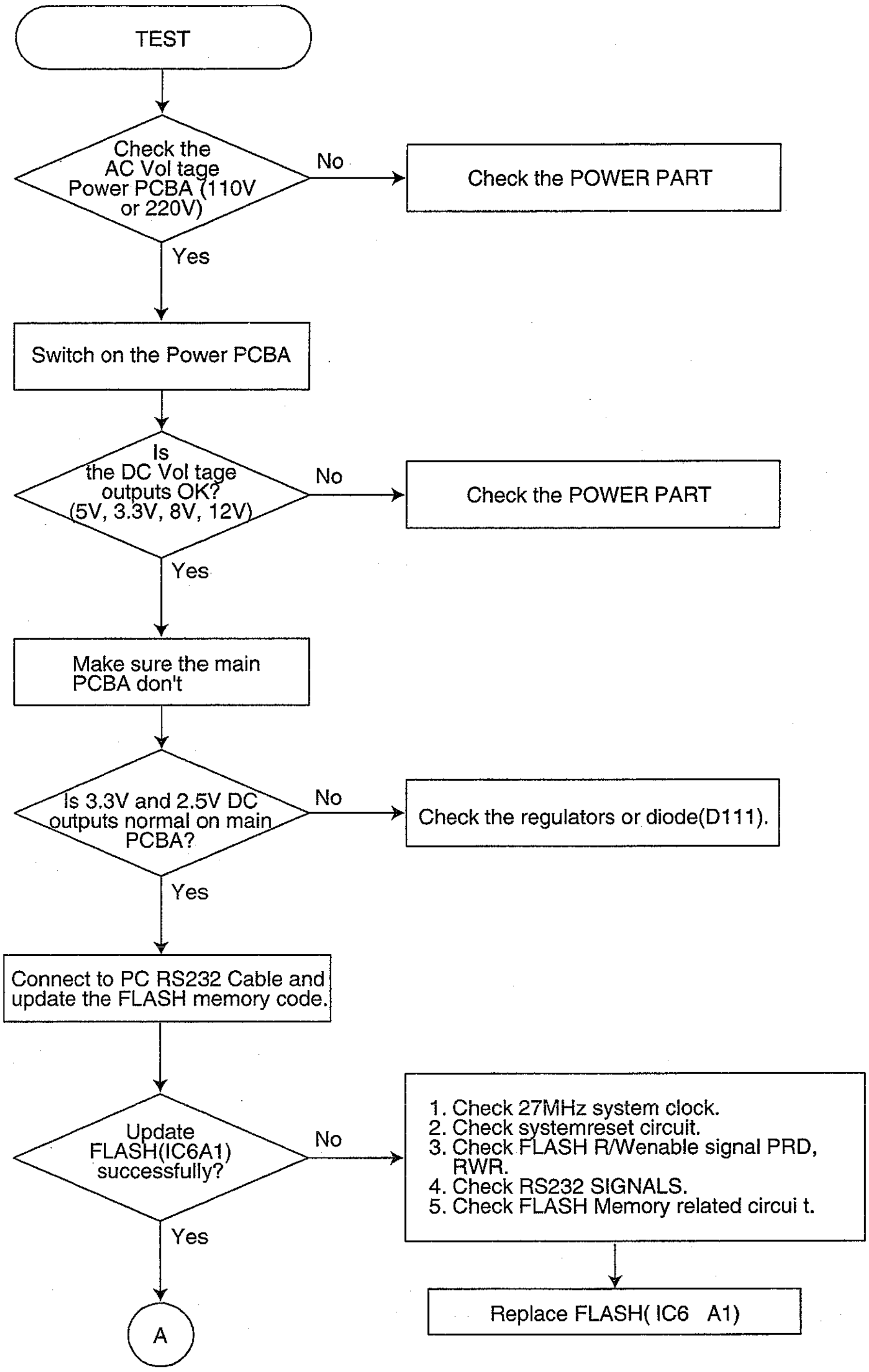
MEMO

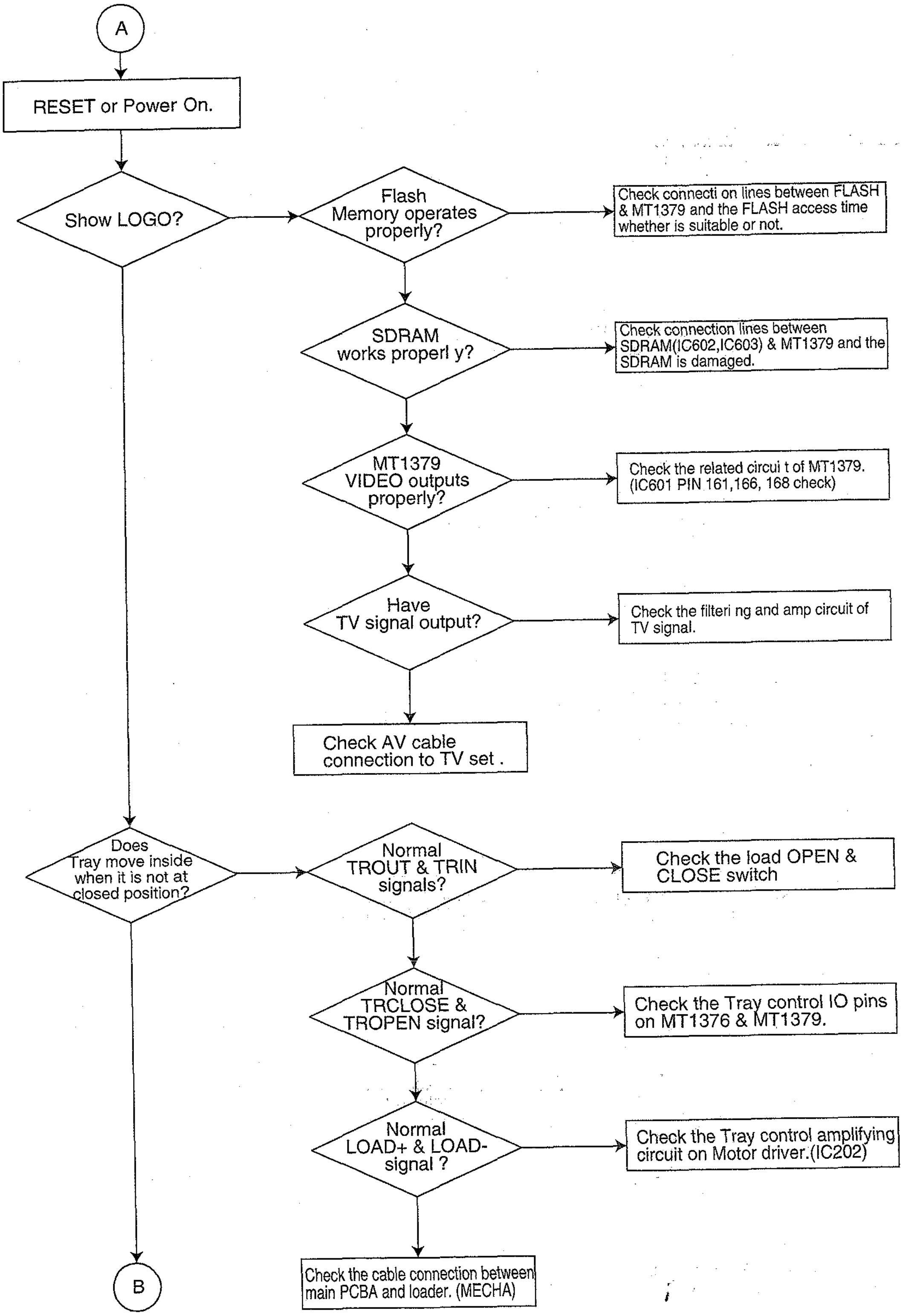
DVD PART
ELECTRICAL TROUBLESHOOTING GUIDE

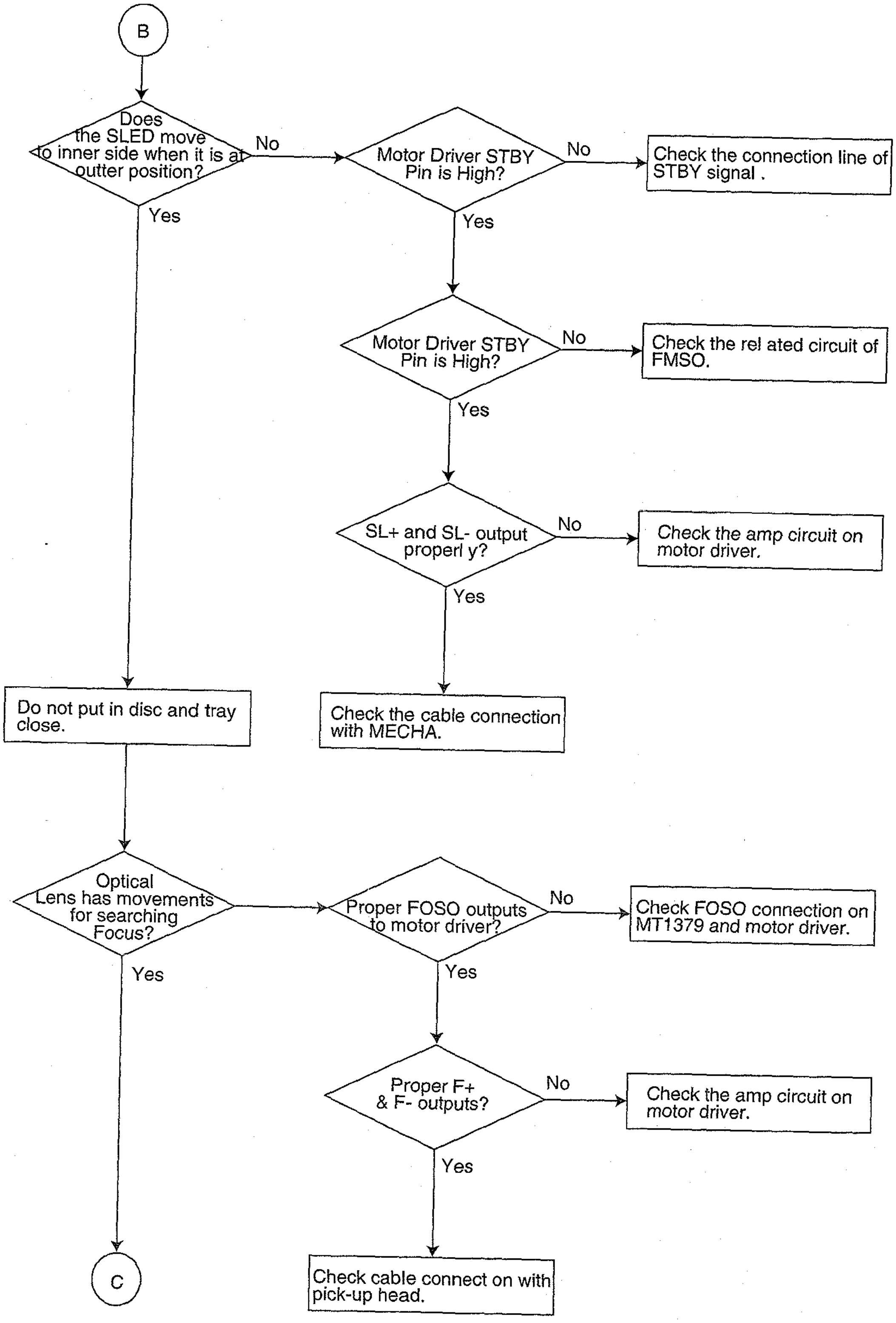
1. System operation flow

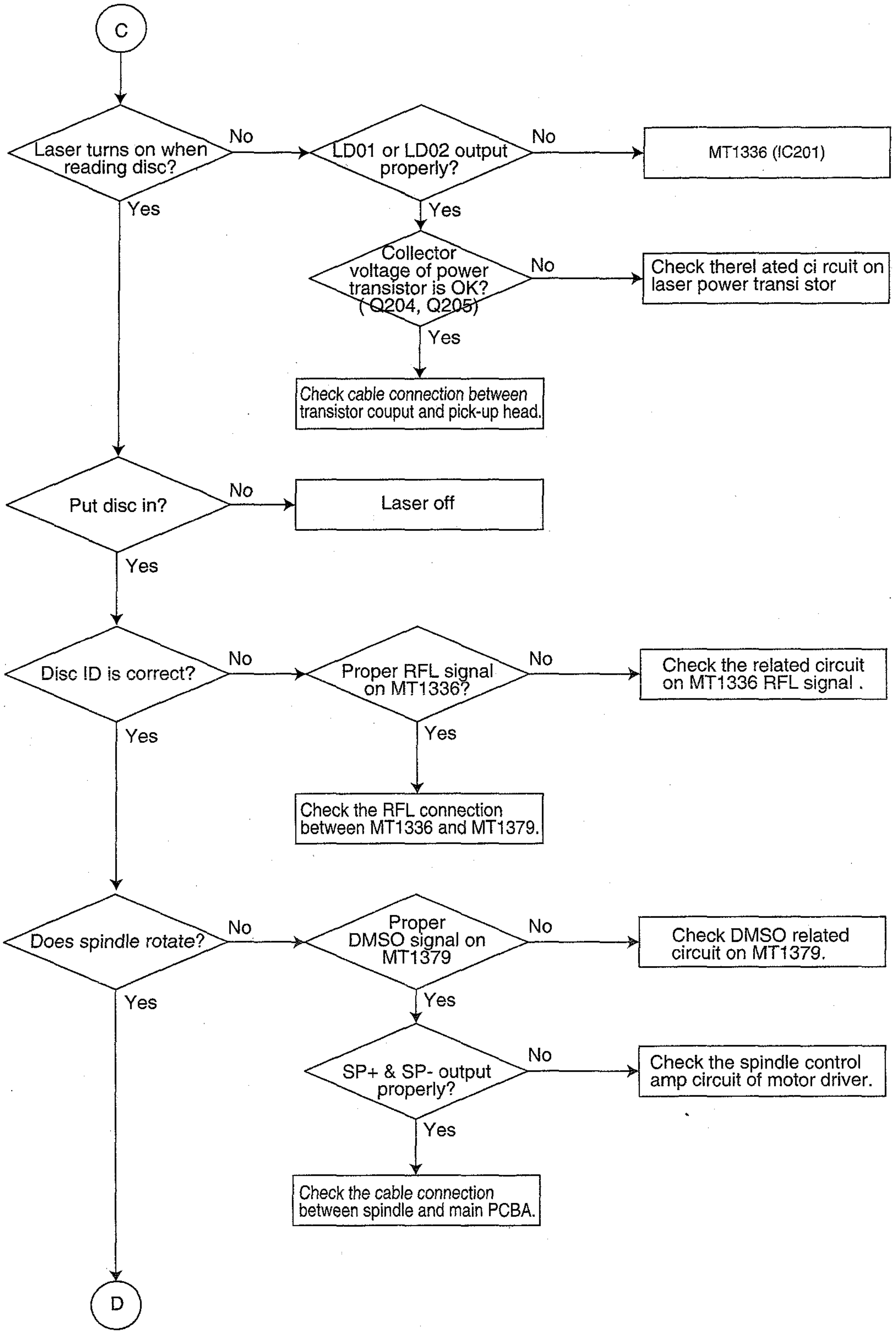

Power On
1. 8032 initializes SERVO, DSP & RISC registers
2. Write RISC code to SDRAM
3. Reset RISC
Show LOGO
Yes
Tray Closed?
No
Tray Close to Closed position
SLED at Inner Side?
Yes
No
SLED Moves to Inner Position
1. Judge whether have disc and disc type
2. Jump to related disc reading procedure
Recieve OPEN/ CLOSE Key?
No
1. Execute Pressed Key & IR Key
2. Systemoperati on Routi ne Loop
1. Stop Playback & Open Tray
2. Display tray open message & LOGO
No
Receive CLOSE Key?
Yes

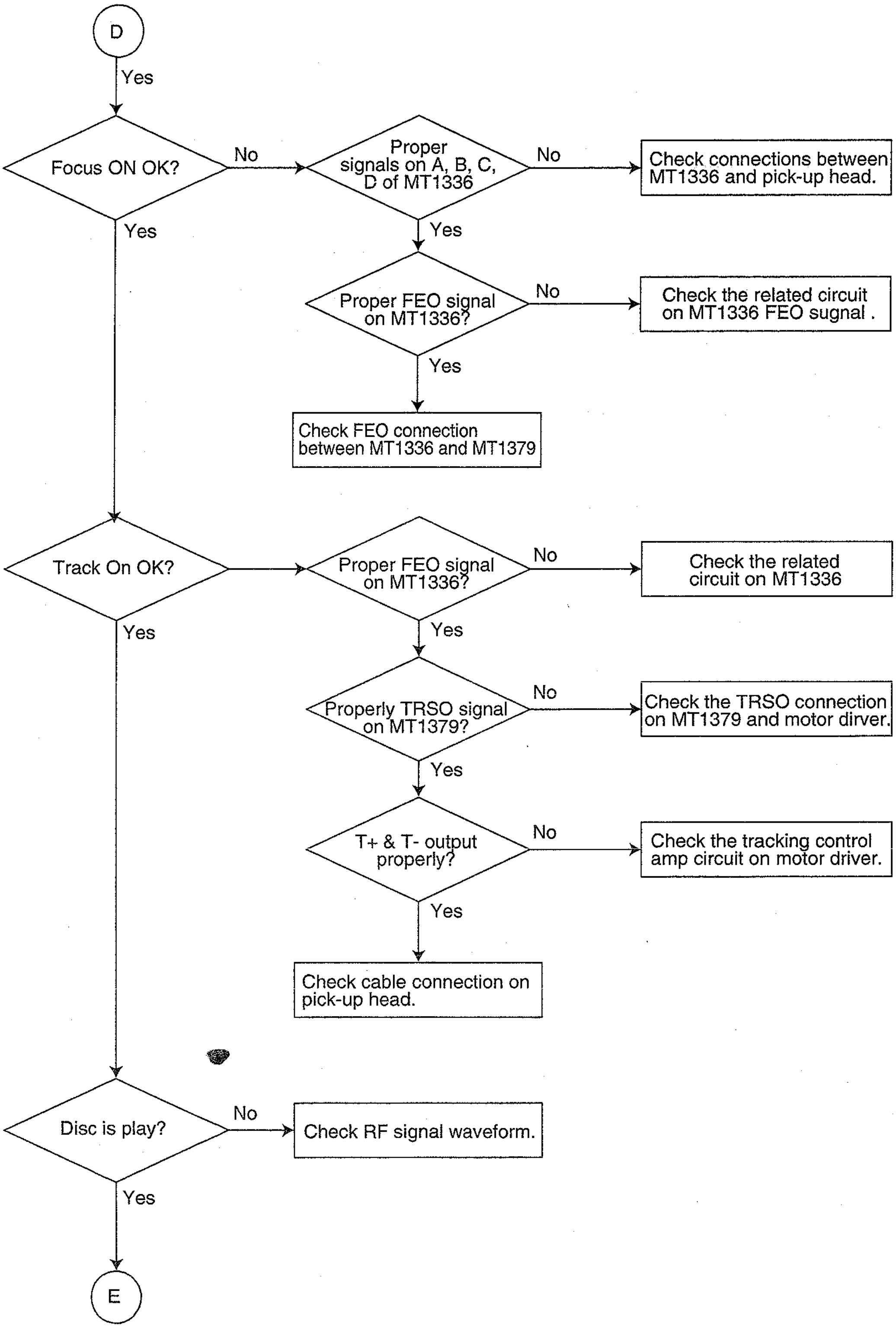
2. Test & debug flow

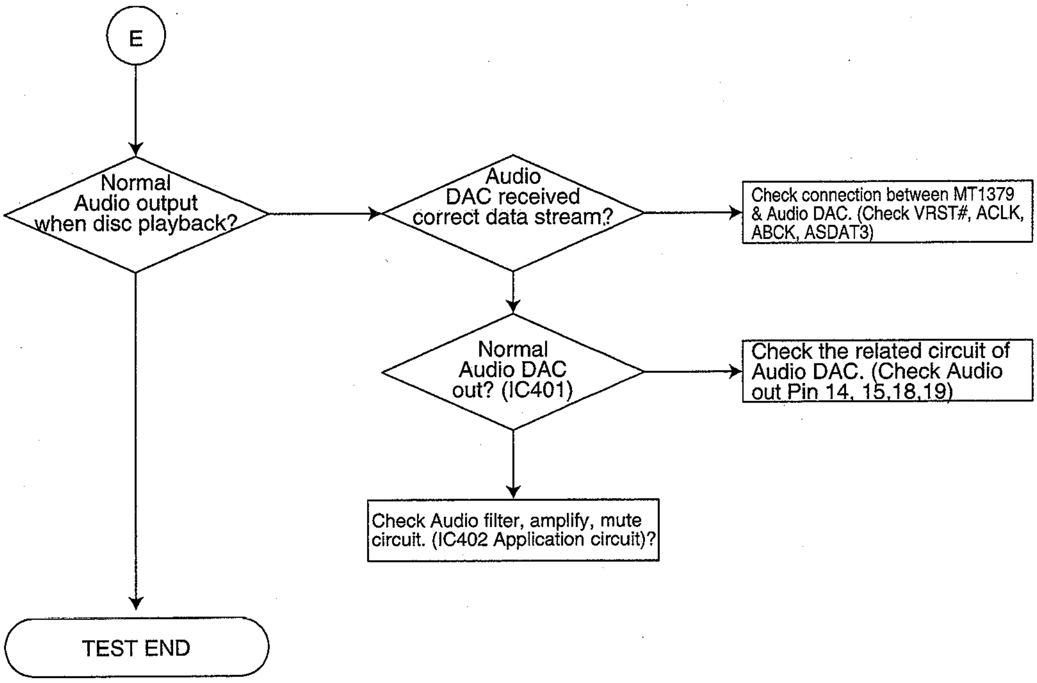

TEST
Check the AC Vol tage Power PCBA (110V or 220V)
No
Check the POWER PART
Yes
Switch on the Power PCBA
Is the DC Vol tage outputs OK? (5V, 3.3V, 8V, 12V)
No
Check the POWER PART
Yes
Make sure the main PCBA don't
Is 3.3V and 2.5V DC outputs normal on main PCBA?
No
Check the regulators or diode(D111).
Yes
Connect to PC RS232 Cable and update the FLASH memory code.
Update FLASH(IC6A1) successfully?
No
1. Check 27MHz system clock.
2. Check systemreset circuit.
3. Check FLASH R/Wenable signal PRD, RWR.
4. Check RS232 SIGNALS.
5. Check FLASH Memory related circui t.
Replace FLASH(IC6 A1)
Yes
A


A
RESET or Power On.
Show LOGO?
Flash Memory operates properly?
Check connection lines between FLASH & MT1379 and the FLASH access time whether is suitable or not.
SDRAM works properly?
Check connection lines between SDRAM(IC602,IC603) & MT1379 and the SDRAM is damaged.
MT1379 VIDEO outputs properly?
Check the related circuit of MT1379. (IC601 PIN 161,166, 168 check)
Have TV signal output?
Check the filtering and amp circuit of TV signal.
Check AV cable connection to TV set .
Does Tray move inside when it is not at closed position?
Normal TROUT & TRIN signals?
Check the load OPEN & CLOSE switch
Normal TRCLOSE & TROPEN signal?
Check the Tray control IO pins on MT1376 & MT1379.
Normal LOAD+ & LOAD- signal ?
Check the Tray control amplifying circuit on Motor driver.(IC202)
Check the cable connection between main PCBA and loader. (MECHA)
B


B
Does the SLED move to inner side when it is at outter position?
No
Motor Driver STBY Pin is High?
No
Check the connection line of STBY signal .
Yes
Yes
Motor Driver STBY Pin is High?
No
Check the rel ated circuit of FMSO.
Yes
SL+ and SL- output properl y?
No
Check the amp circuit on motor driver.
Yes
Do not put in disc and tray close.
Check the cable connection with MECHA.
Optical Lens has movements for searching Focus?
Proper FOSO outputs to motor driver?
No
Check FOSO connection on MT1379 and motor driver.
Yes
Yes
Proper F+ & F- outputs?
No
Check the amp circuit on motor driver.
Yes
C
Check cable connect on with pick-up head.


C
Laser turns on when reading disc?
No
LD01 or LD02 output properly?
No
MT1336 (IC201)
Yes
Yes
Collector voltage of power transistor is OK? (Q204, Q205)
No
Check therel ated ci rcuit on laser power transi stor
Yes
Check cable connection between transistor couput and pick-up head.
Put disc in?
No
Laser off
Yes
Disc ID is correct?
No
Proper RFL signal on MT1336?
No
Check the related circuit on MT1336 RFL signal .
Yes
Yes
Check the RFL connection between MT1336 and MT1379.
Does spindle rotate?
No
Proper DMSO signal on MT1379
No
Check DMSO related circuit on MT1379.
Yes
Yes
SP+ & SP- output properly?
No
Check the spindle control amp circuit of motor driver.
Yes
Check the cable connection between spindle and main PCBA.
D


D
Yes
Focus ON OK?
No
Proper signals on A, B, C, D of MT1336
No
Check connections between MT1336 and pick-up head.
Yes
Yes
Proper FEO signal on MT1336?
No
Check the related circuit on MT1336 FEO sugnal .
Yes
Check FEO connection between MT1336 and MT1379
Track On OK?
Proper FEO signal on MT1336?
No
Check the related circuit on MT1336
Yes
Yes
Properly TRSO signal on MT1379?
No
Check the TRSO connection on MT1379 and motor dirver.
Yes
T+ & T- output properly?
No
Check the tracking control amp circuit on motor driver.
Yes
Check cable connection on pick-up head.
Disc is play?
No
Check RF signal waveform.
Yes
E


E
Normal Audio output when disc playback?
Audio DAC received correct data stream?
Check connection between MT1379 & Audio DAC. (Check VRST#, ACLK, ABCK, ASDAT3)
Normal Audio DAC out? (IC401)
Check the related circuit of Audio DAC. (Check Audio out Pin 14, 15,18,19)
Check Audio filter, amplify, mute circuit. (IC402 Application circuit)?
TEST END

DETAILS AND WAVEFORMS ON SYSTEM TEST AND DEBUGGING

1. SYSTEM 27MHz CLOCK,RESET,FLASH R/W SIGNAL

1) MT1379 main clock is at 27MHz(X501)

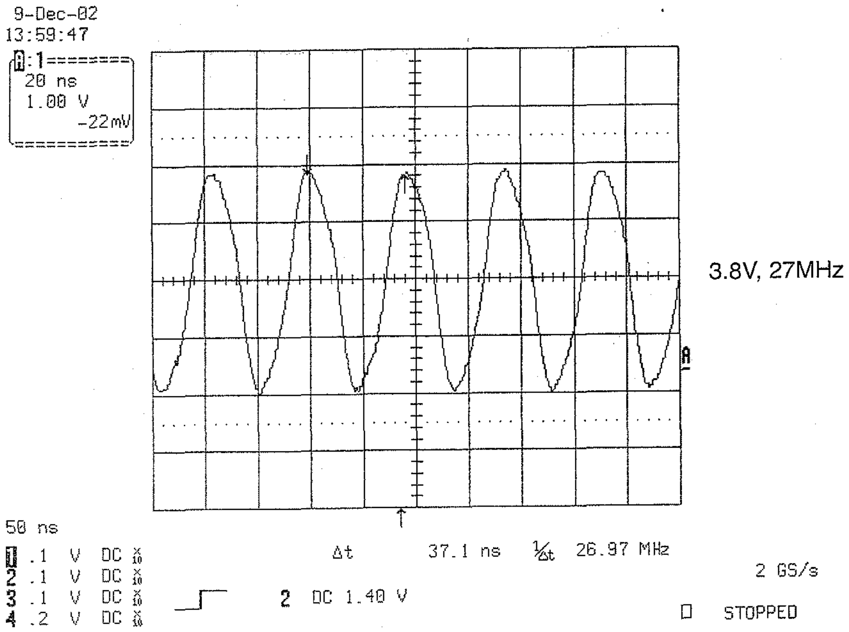


FIG 1-1

2) MT1379 & MT1336 reset is high active.

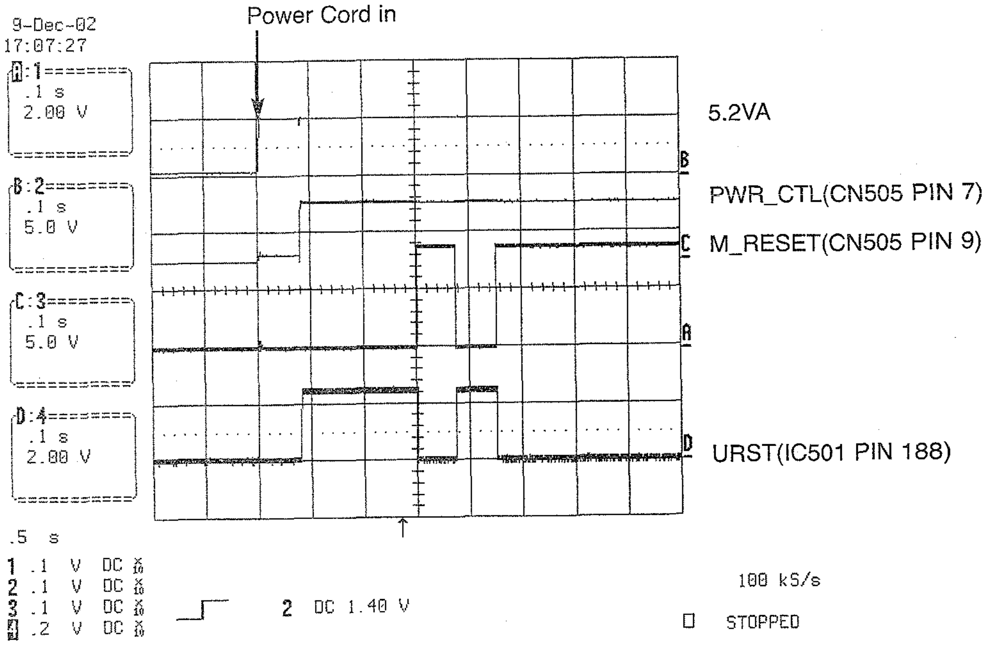


FIG 1-2

3) RS232 waveform during procedure(Downloading)

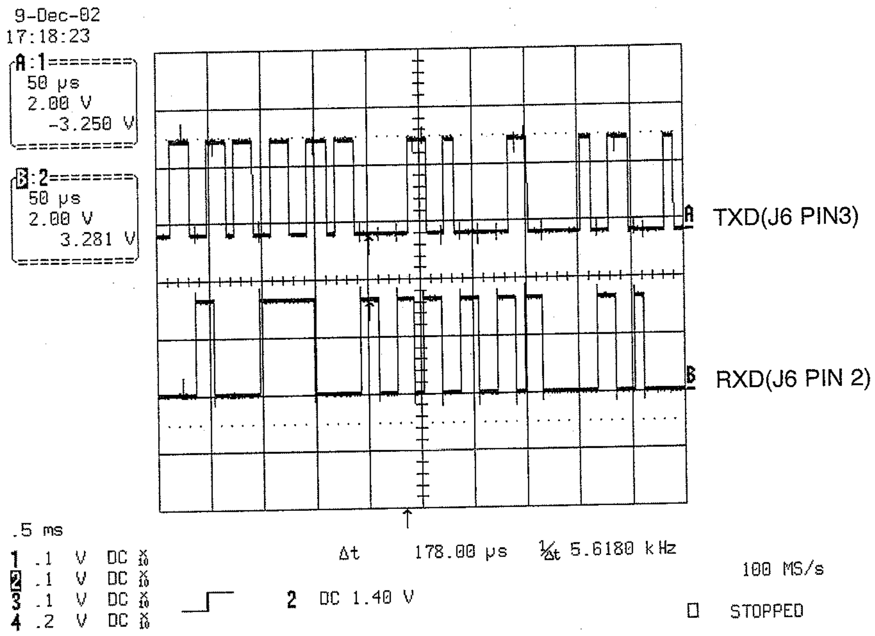


FIG 1-3

4) Flash R/W enable signal during download(Downloading)

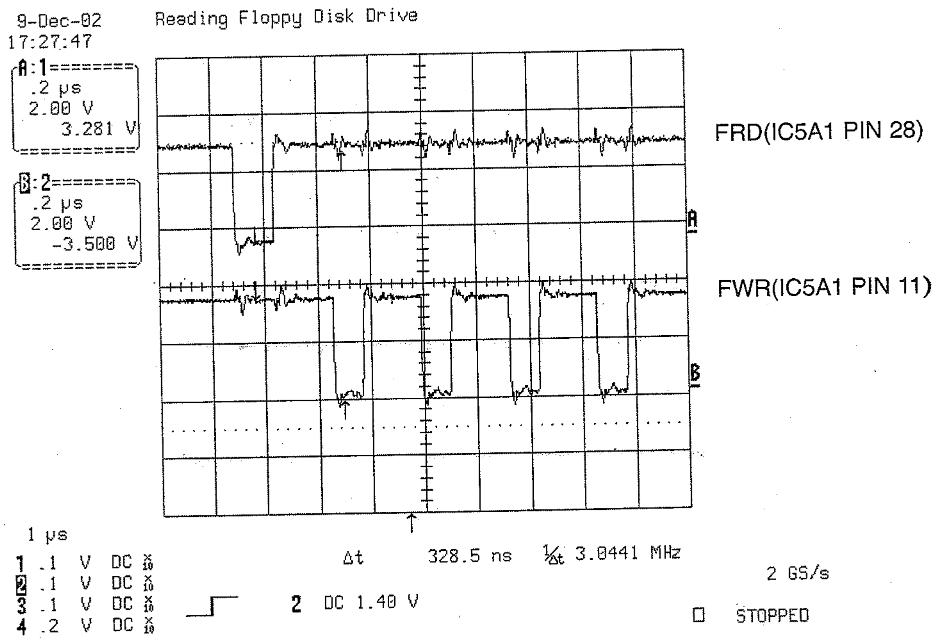
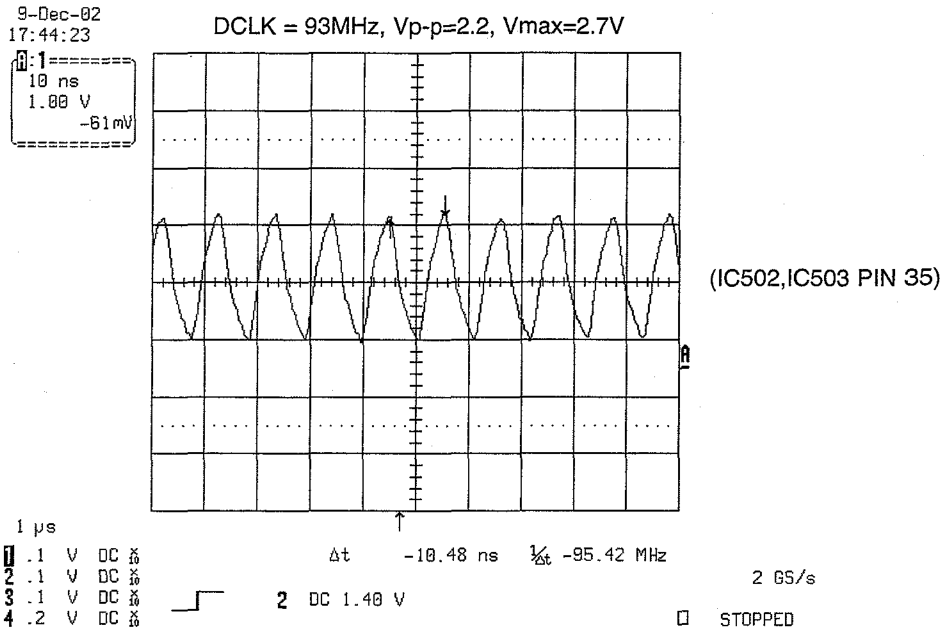


FIG 1-4

2. SDRAM CLOCK

1) MT1379 main clock is at 27MHz(X501)

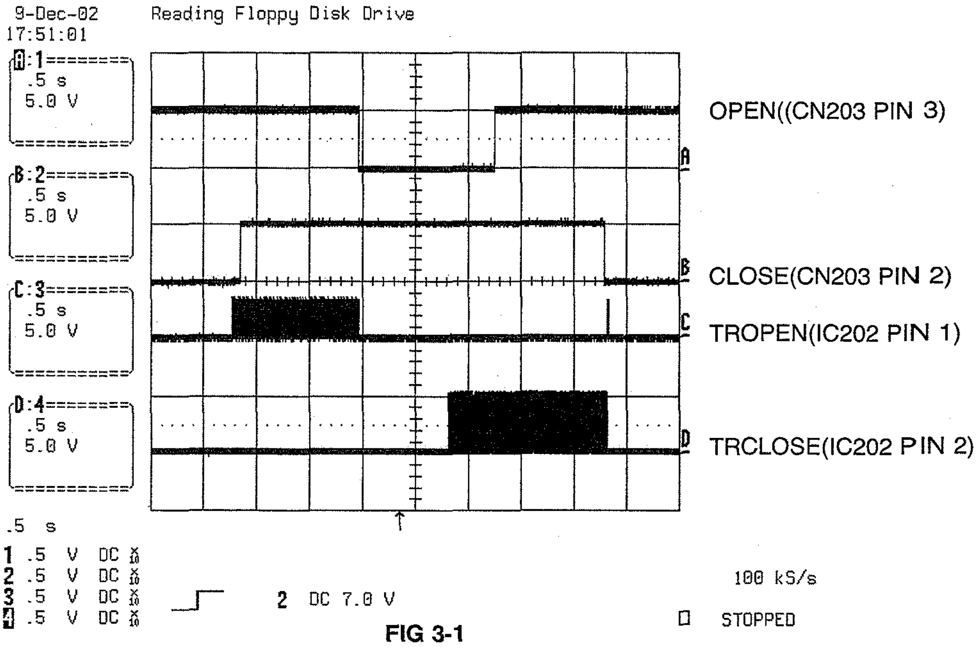

DCLK = 93MHz, Vp-p=2.2, Vmax=2.7V

(IC502,IC503 PIN 35)

FIG 2-1

3. TRAY OPEN/CLOSE SIGNAL

1) Tray open/close waveform


OPEN((CN203 PIN 3)

CLOSE(CN203 PIN 2)

TROPEN(IC202 PIN 1)

TRCLOSE(IC202 PIN 2)

FIG 3-1

2) Tray close waveform

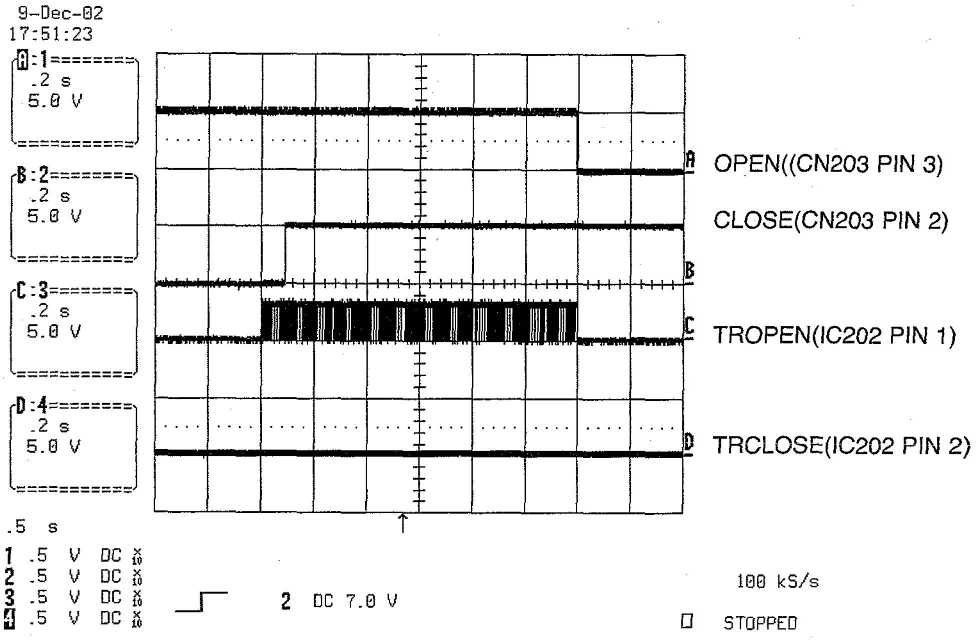


FIG 3-2

3) Tray open waveform

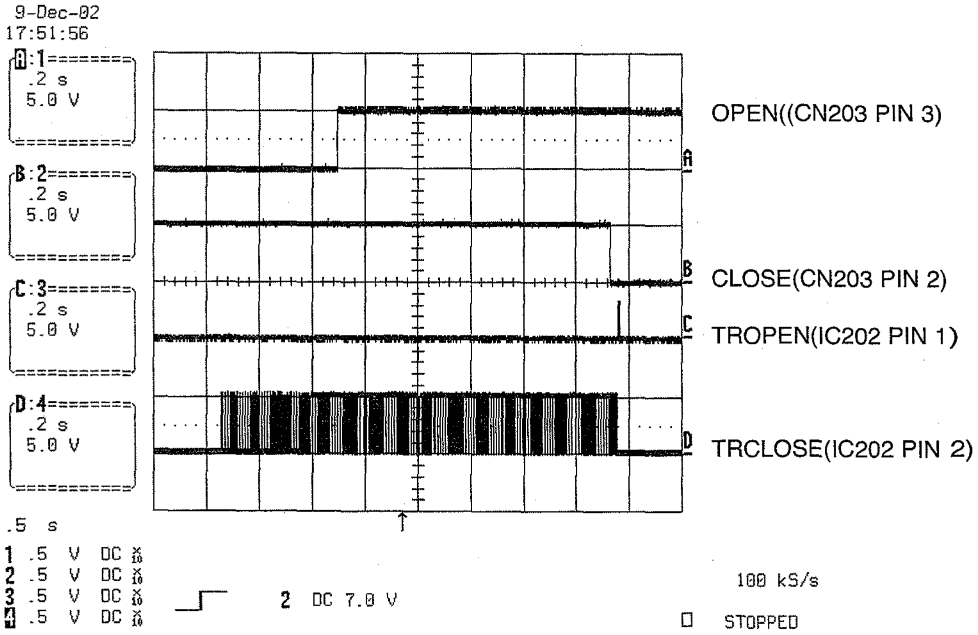
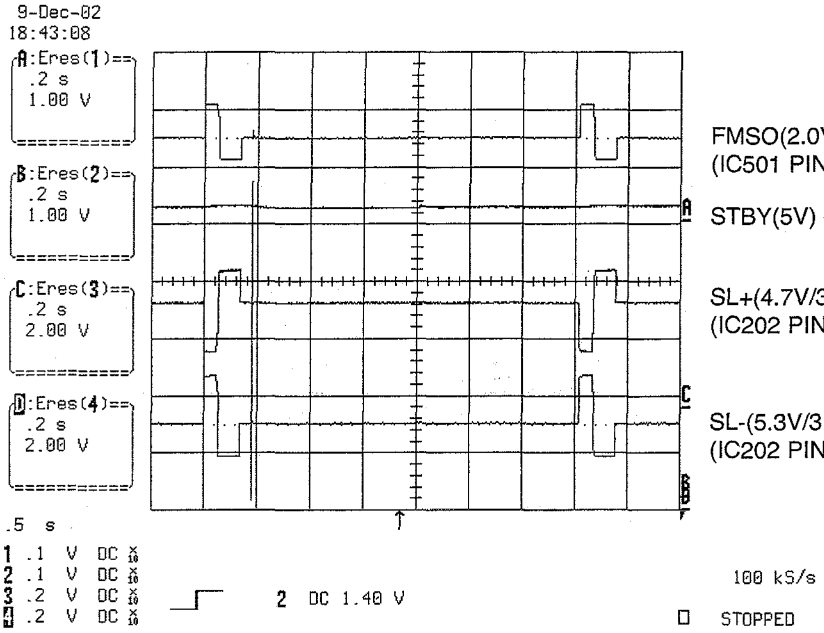


FIG 3-3

4. SLED CONTROL RELATED SIGNAL (NO DISC CONDITION)



FMSO(2.0V/1.4V/1.0V)
(IC501 PIN 19)

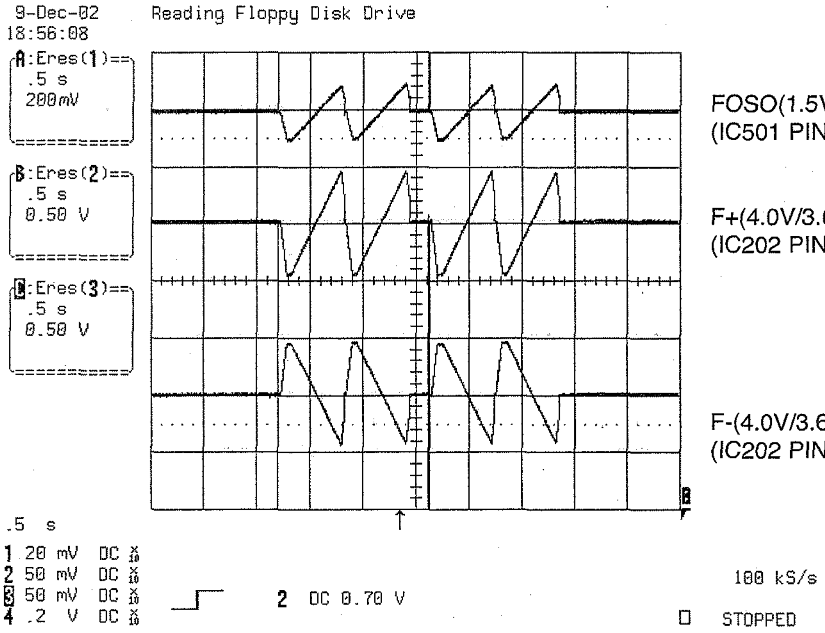
STBY(5V) – (IC201 PIN 50)

SL+(4.7V/3.6V/1.9V)
(IC202 PIN 12)

SL-(5.3V/3.7V/2.5V)
(IC202 PIN 13)

FIG 4-1

5. LENS CONTROL RELATED SIGNAL(NO DISC CONDITION)



FOSO(1.5V/1.4V/1.3V)
(IC501 PIN 12)

F+(4.0V/3.6V/3.2V)
(IC202 PIN 9)

F-(4.0V/3.6V/3.2V)
(IC202 PIN 8)

FIG 5-1

6. LASER POWER CONTROL RELATED SIGNAL(NO DISC CONDITION)

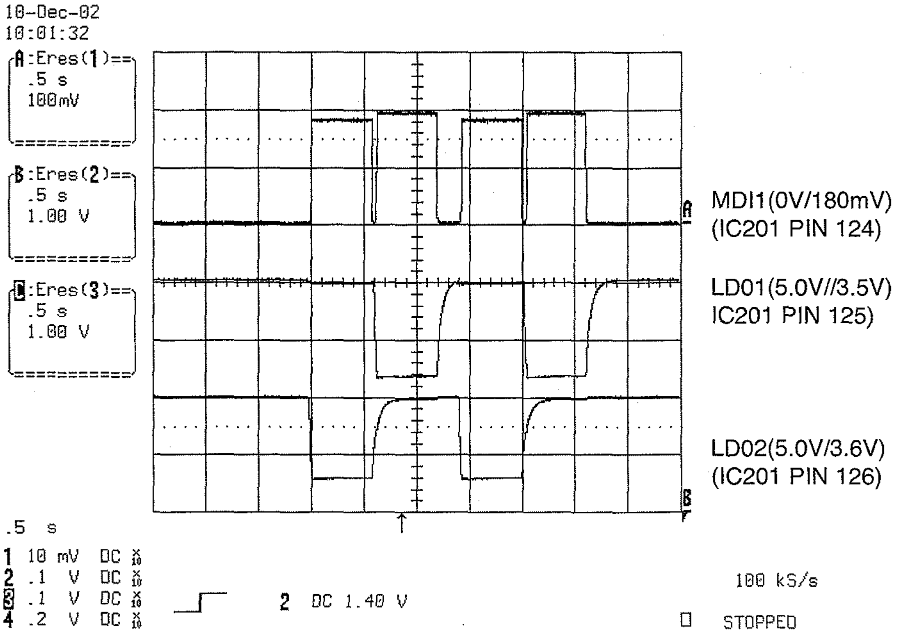


FIG 6-1

7. DISC TYPE JUDGEMENT WAVEFORM

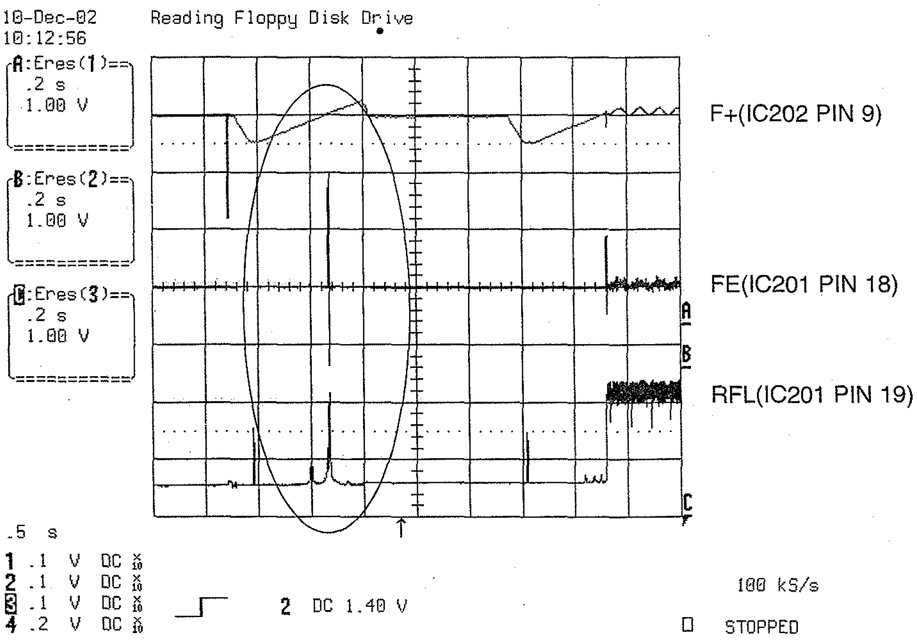


FIG 7-1 (DVD)

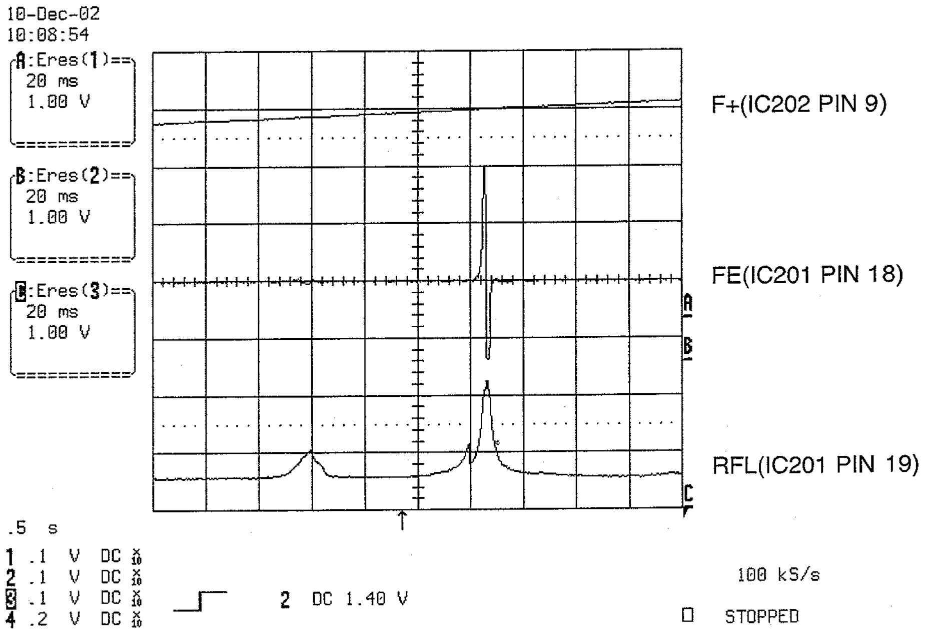


FIG 7-2 (DVD)

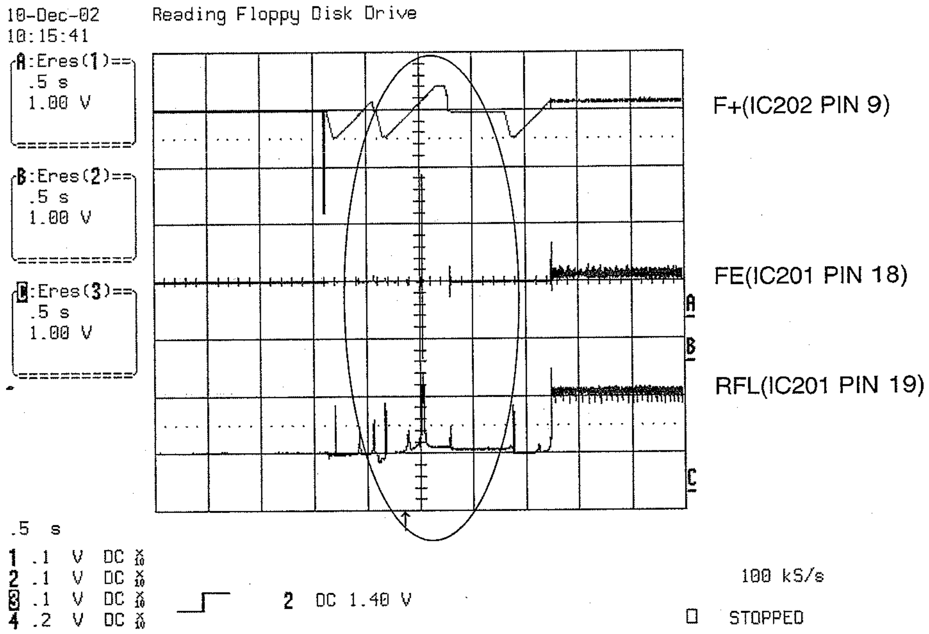


FIG 7-3 (CD)

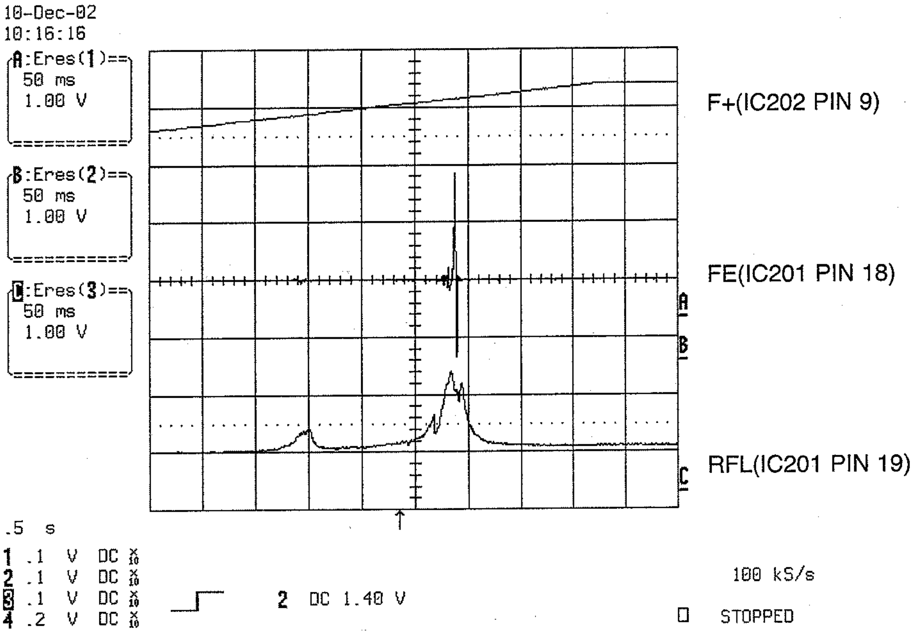


FIG 7-4 (CD)

8. FOCUS ON WAVEFORM

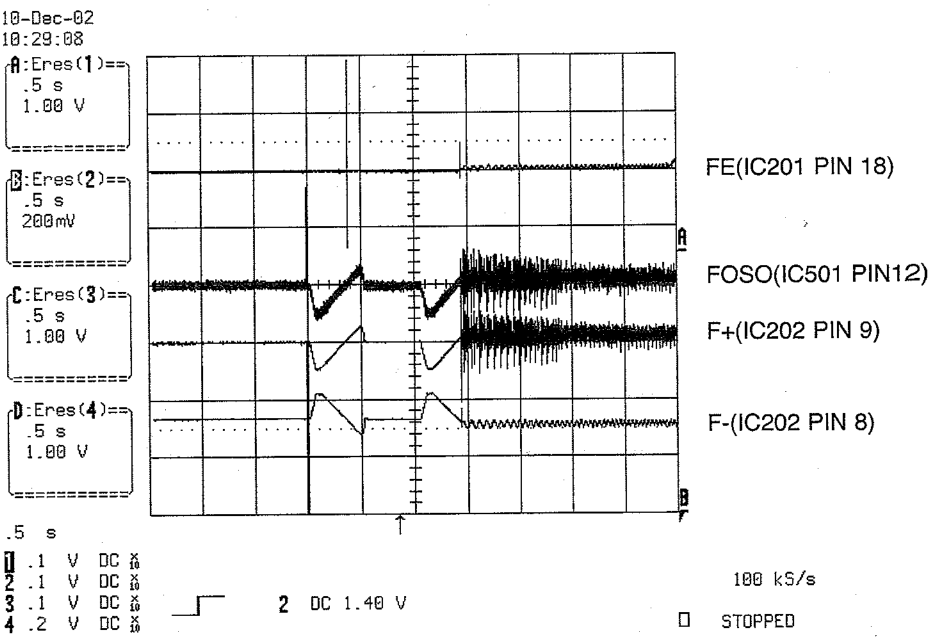


FIG 8-1 (DVD)

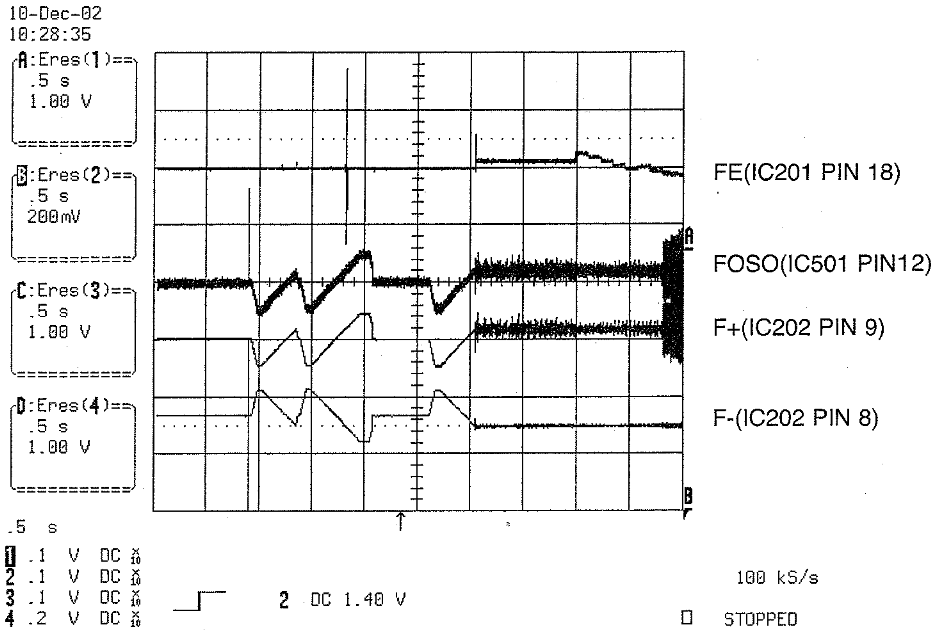


FIG 8-2 (CD)

9. SPINDLE CONTROL WAVEFORM (NO DISC CONDITION)

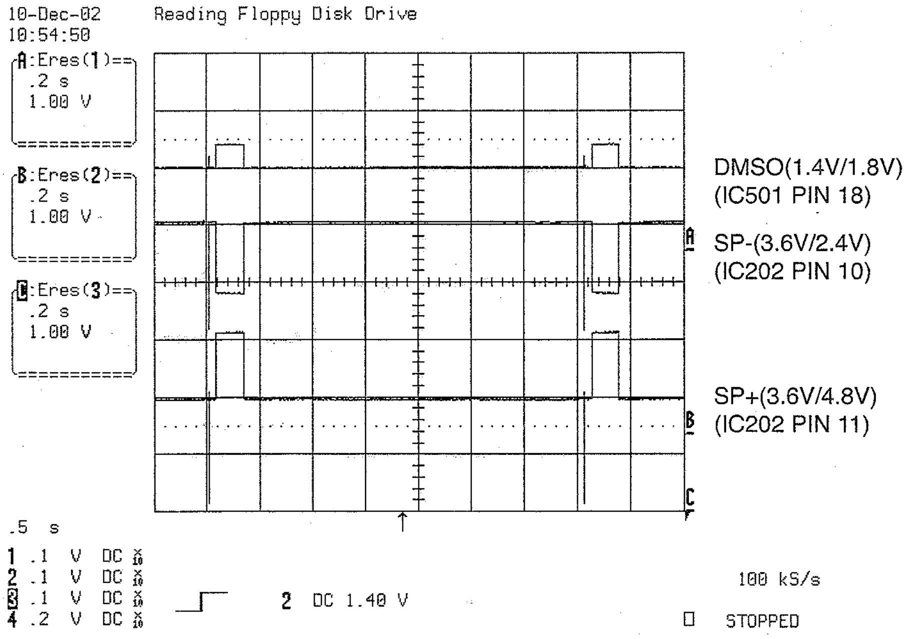


FIG 9-1

10. TRACKING CONTROL RELATED SIGNAL(System checking)

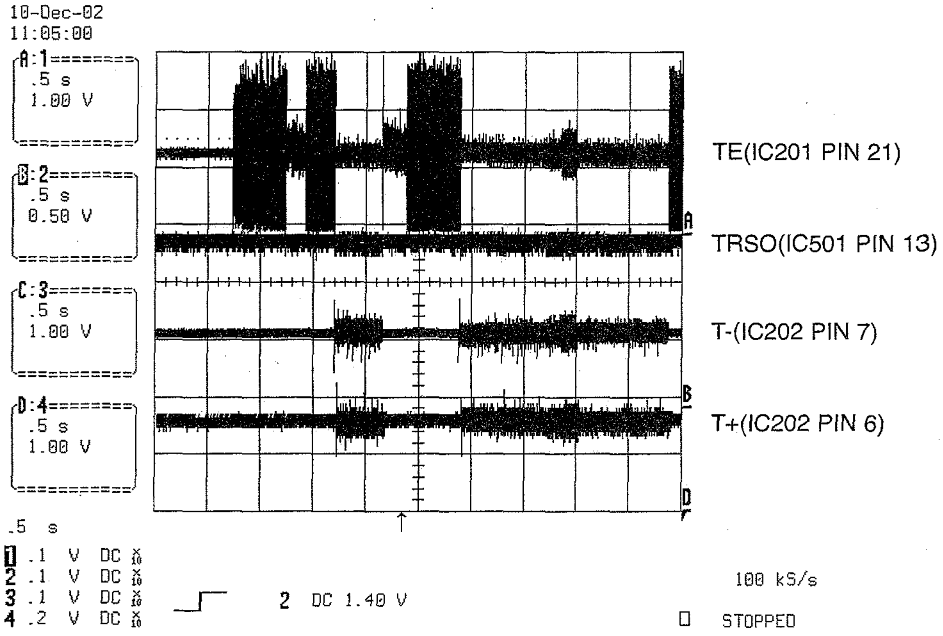


FIG 10-1(DVD)

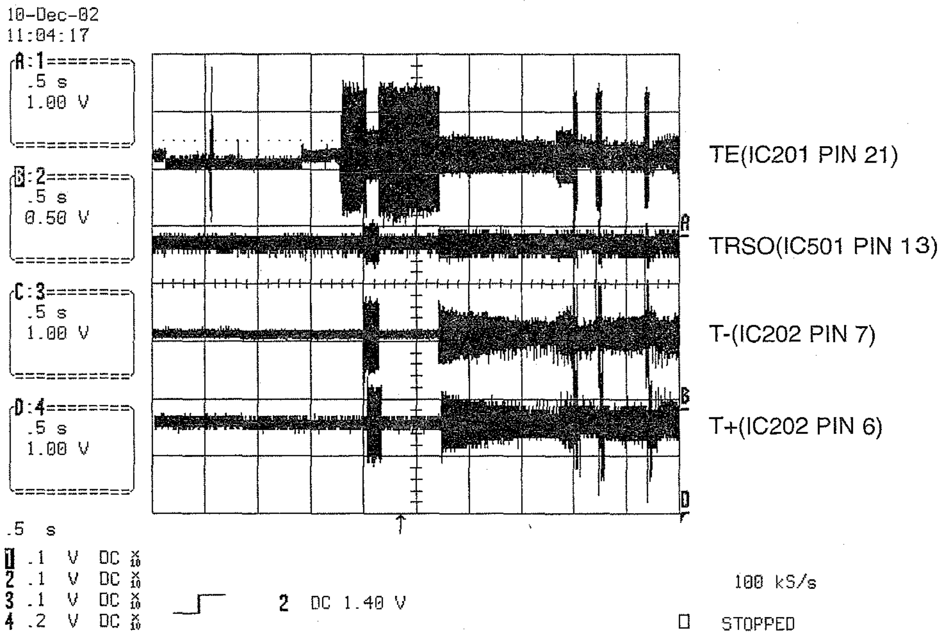
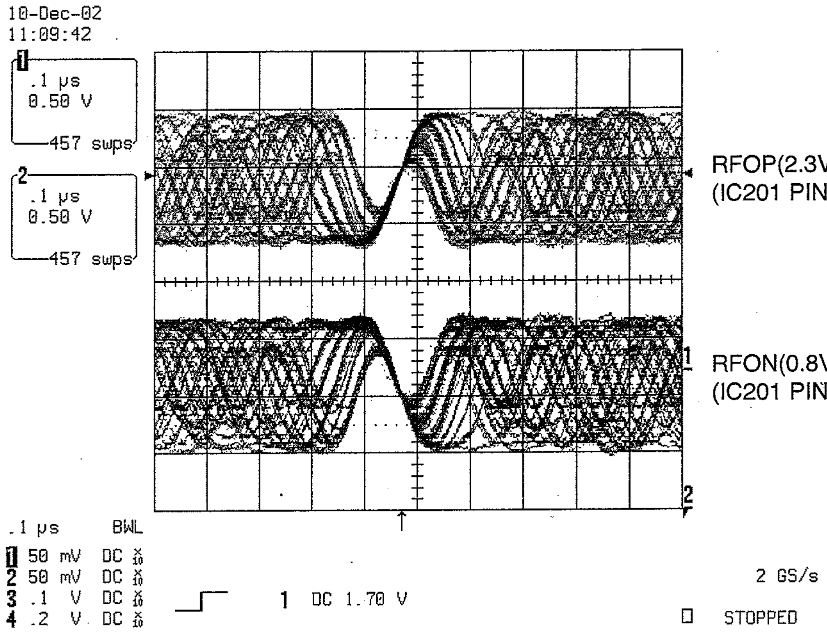


FIG 10-2(CD)

11. RF WAVEFORM

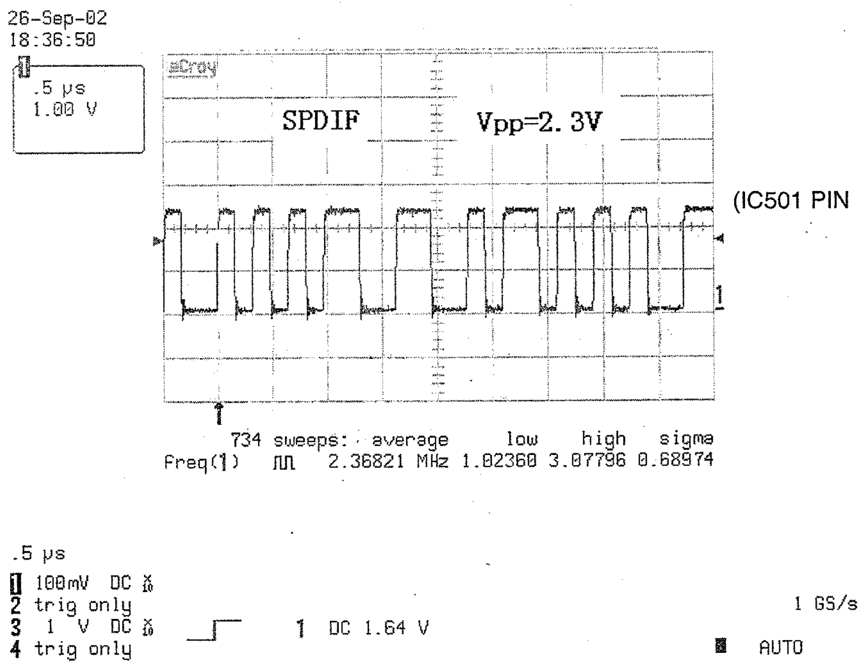


RFOP(2.3V/1.1V)
(IC201 PIN 6)

RFON(0.8V/2.0V)
(IC201 PIN 7)

FIG 11-1

12. MT1379 AUDIO OPTICAL AND COAXIAL OUTPUT (ASPDIF)

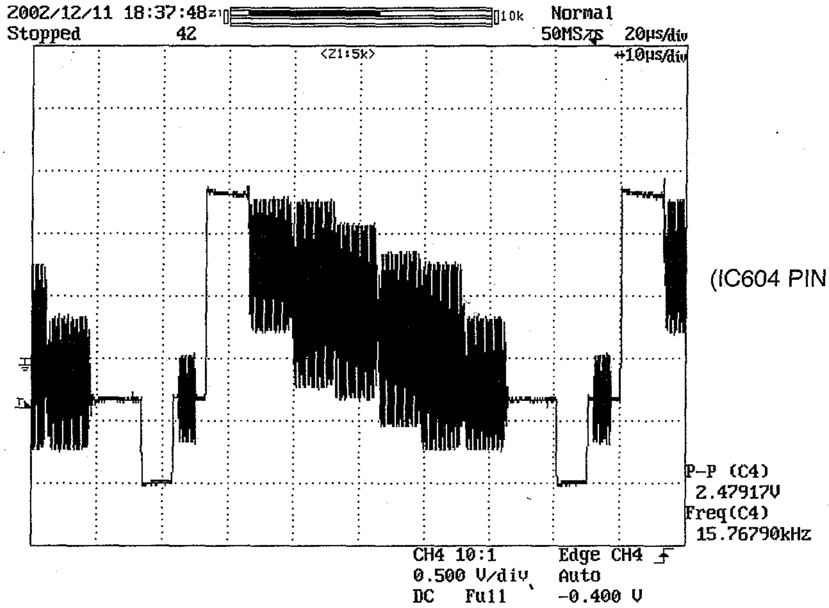


(IC501 PIN 153)

FIG 12-1

13. MT1379 VIDEO OUTPUT WAVEFORM

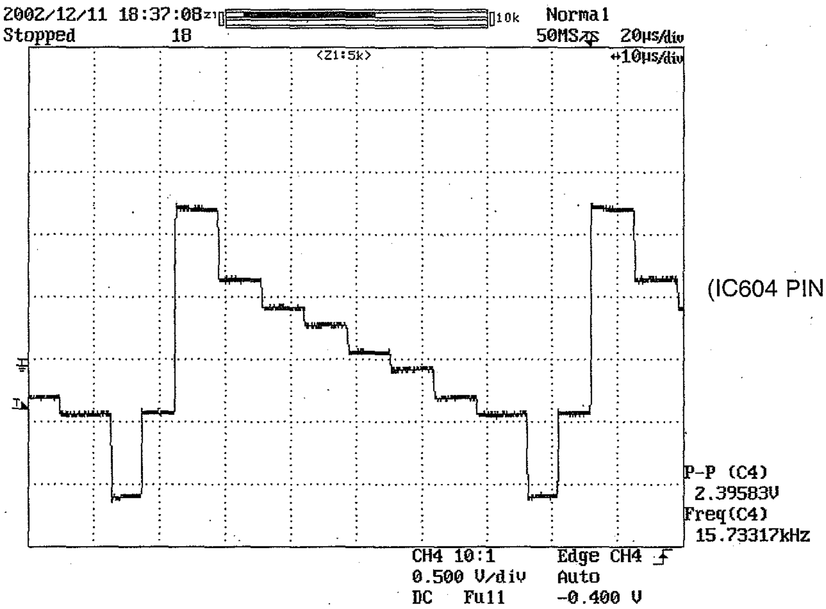
1) Full colorbar signal(CVBS)



(IC604 PIN 23)

FIG 13-1

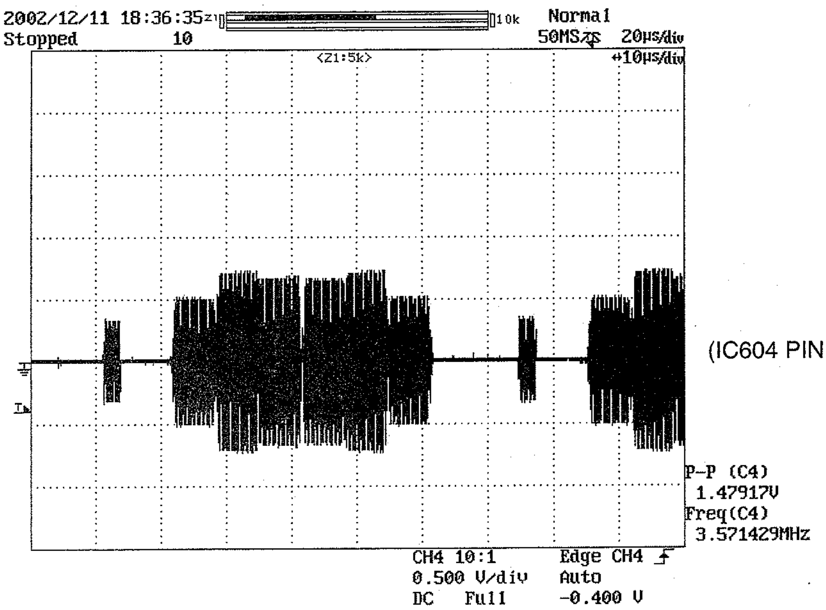
2) Y



(IC604 PIN 21)

FIG 13-2

3) C

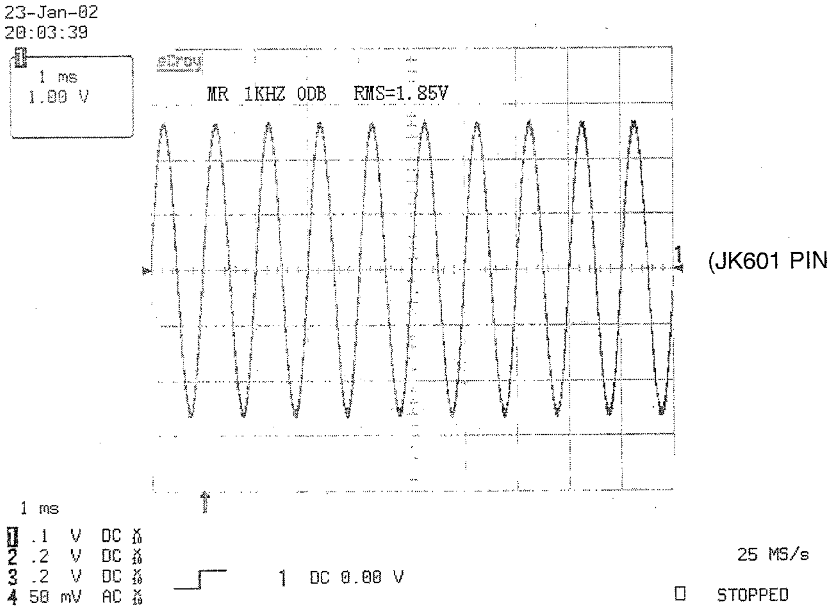


(IC604 PIN 26)

FIG 13-3

14. AUDIO OUTPUT FROM AUDIO DAC

1) Audio L/R



(JK601 PIN 4,5)

FIG 14-1

2) Audio related Signal

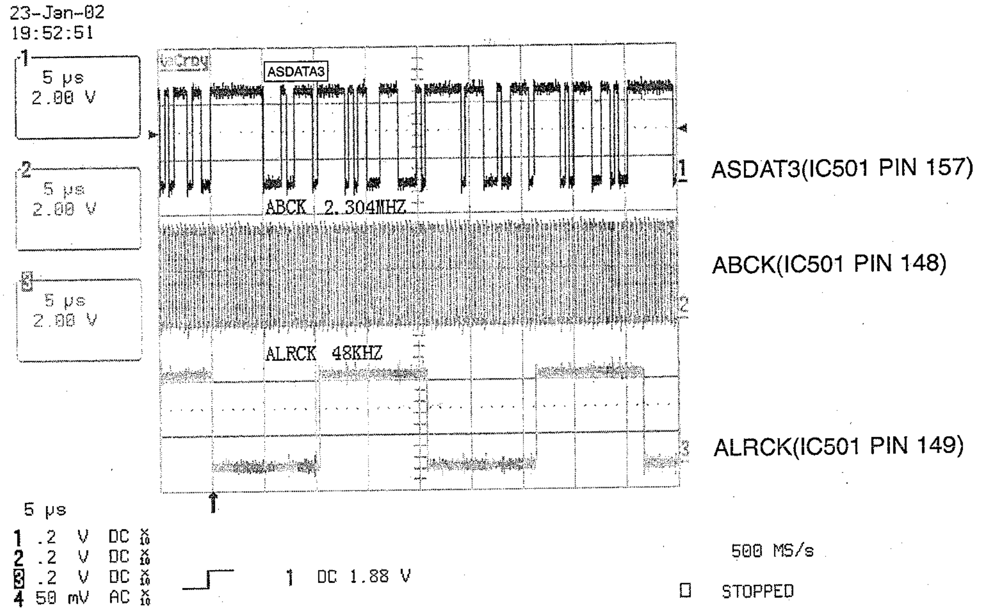
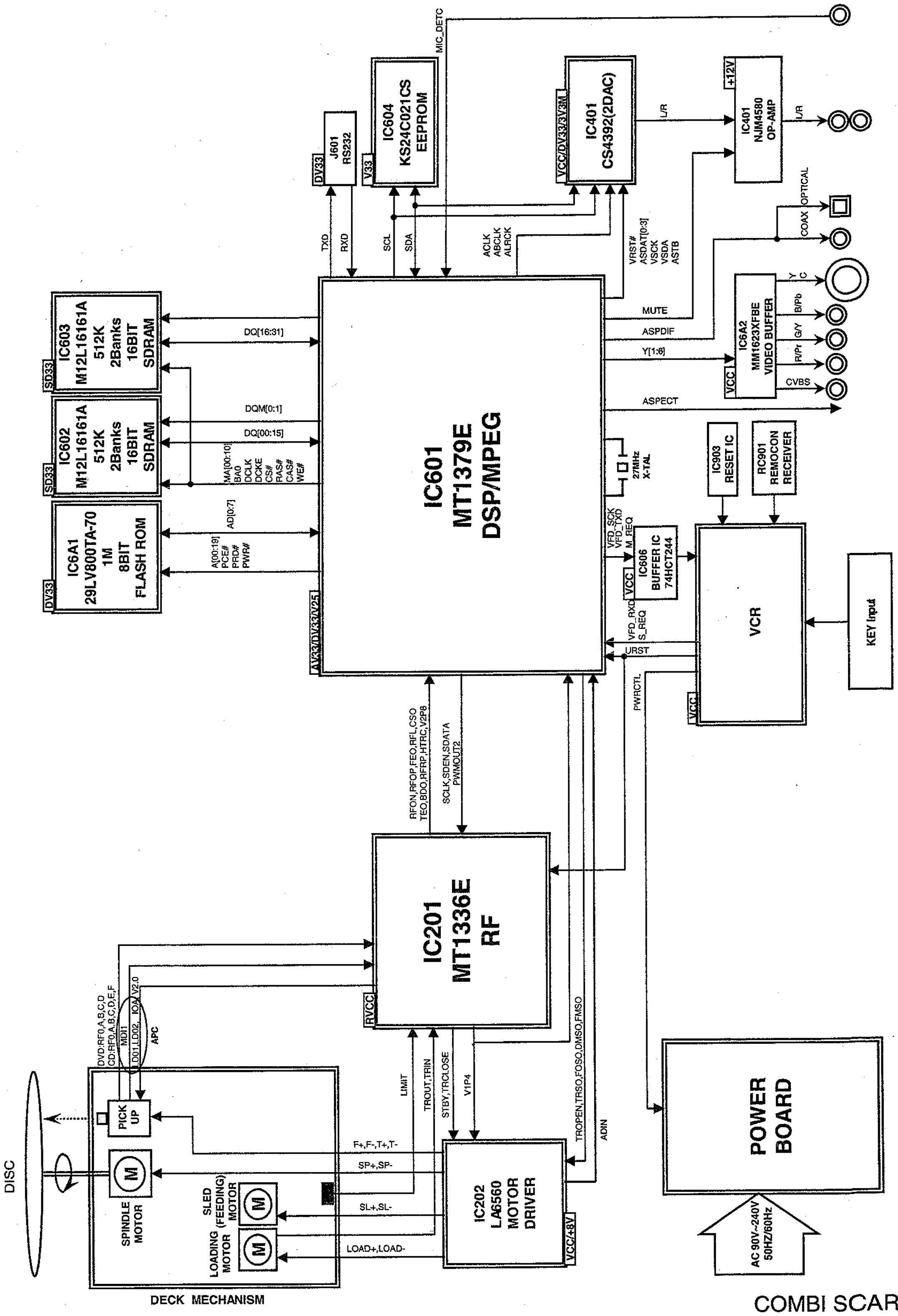


FIG 14-2

BLOCK DIAGRAMS

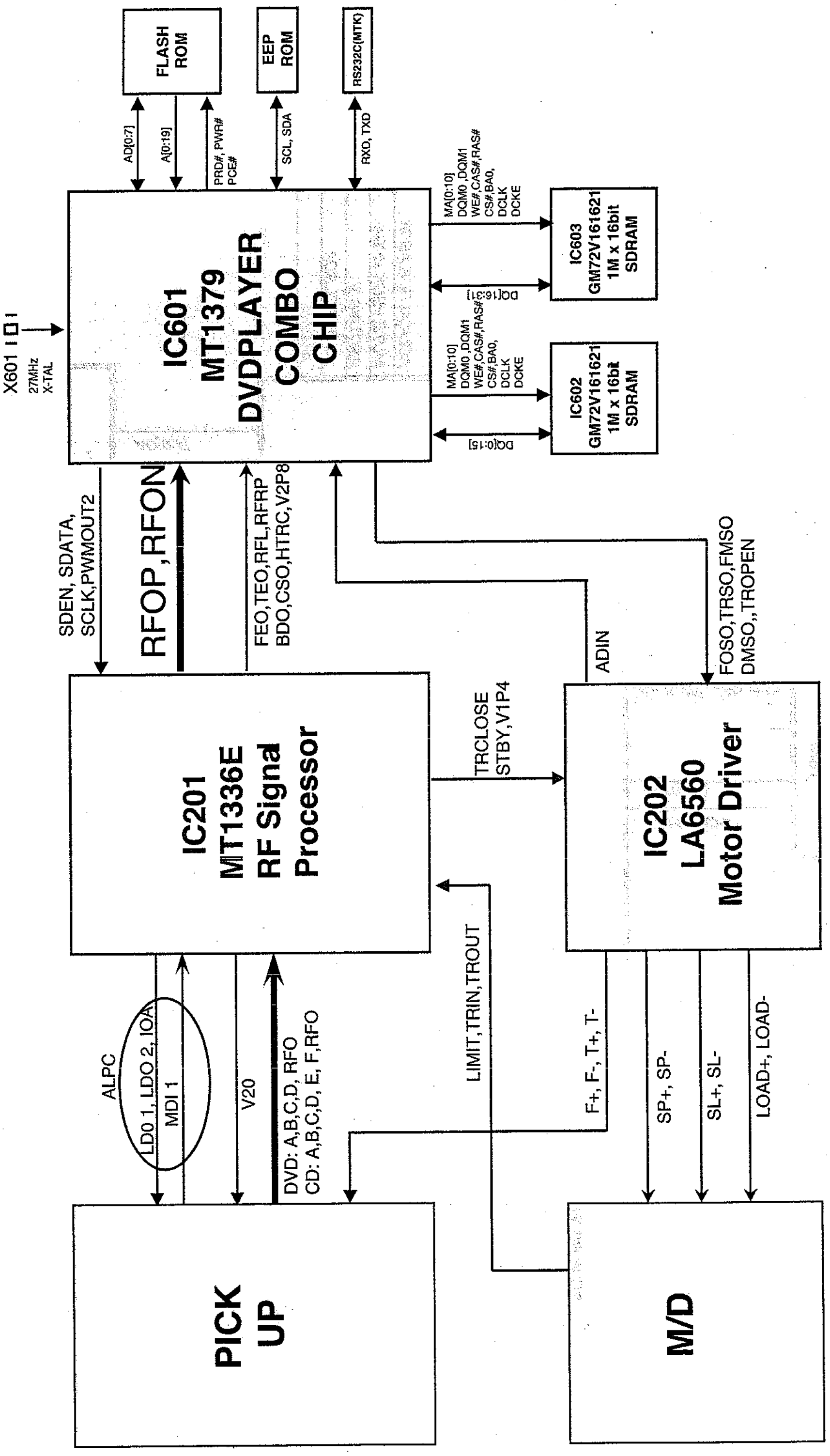
1. Overall Block Diagram



IC601
MT1379E
DSP/MPEG
AV33/DV33/V25
IC201
MT1336E
RF
RVCC
IC202
LA6560
MOTOR
DRIVER
VCC/+8V
IC603
M12L16161A
512K
2Banks
16BIT
SDRAM
SD33
IC602
M12L16161A
512K
2Banks
16BIT
SDRAM
SD33
IC6A1
29LV800TA-70
1M
8BIT
FLASH ROM
DV33
DQ[16:31]
DQM[0:1]
DQ[00:15]
MA[00:10]
BA0
DCLK
DCKE
CS#
RAS#
CAS#
WE#
AD[0:7]
A[00:19]
PCE#
PRD#
PWR#
J601
RS232
DV33
TXD
RXD
IC604
KS24C021CS
EEPROM
V33
SCL
SDA
MIC_DETC
IC401
CS4392(2DAC)
VCC/DV33/3V3M
ACLK
ABCLK
ALRCK
L/R
IC401
NJM4580
OP-AMP
+12V
L/R
VRST#
ASDAT[0:3]
VSCK
VSDA
ASTB
OPTICAL
COAX
MUTE
ASPDIF
Y[1:6]
IC6A2
MM1623XFBE
VIDEO BUFFER
VCC
Y
C
B/Pb
G/Y
R/Pr
CVBS
ASPECT
27MHz
X-TAL
IC903
RESET IC
RC901
REMOCON
RECEIVER
VFD_SCK
VFD_TXD
M_REQ
IC606
BUFFER IC
74HCT244
VCC
VFD_RXD
S_REQ
URST
VCR
VCC
KEY Input
PWRCTL
POWER
BOARD
AC 90V~240V
50HZ/60Hz
RFON,RFOP,FEO,RFL,CSO
TEO,BDO,RFRP,HTRC,V2P8
SCLK,SDEN,SDATA
PWMOUT2
TROPEN,TRSO,FOSO,DMSO,FMSO
ADIN
LIMIT
TROUT,TRIN
STBY,TRCLOSE
V1P4
DVD-RF0,A,B,C,D
CD-RF0,A,B,C,D,E,F
MDI1
DO1,LDO2
IOA,V2.0
APC
PICK
UP
DISC
SPINDLE
MOTOR
SLED
(FEEDING)
MOTOR
LOADING
MOTOR
M
F+,F-,T+,T-
SP+,SP-
SL+,SL-
LOAD+,LOAD-
DECK MECHANISM

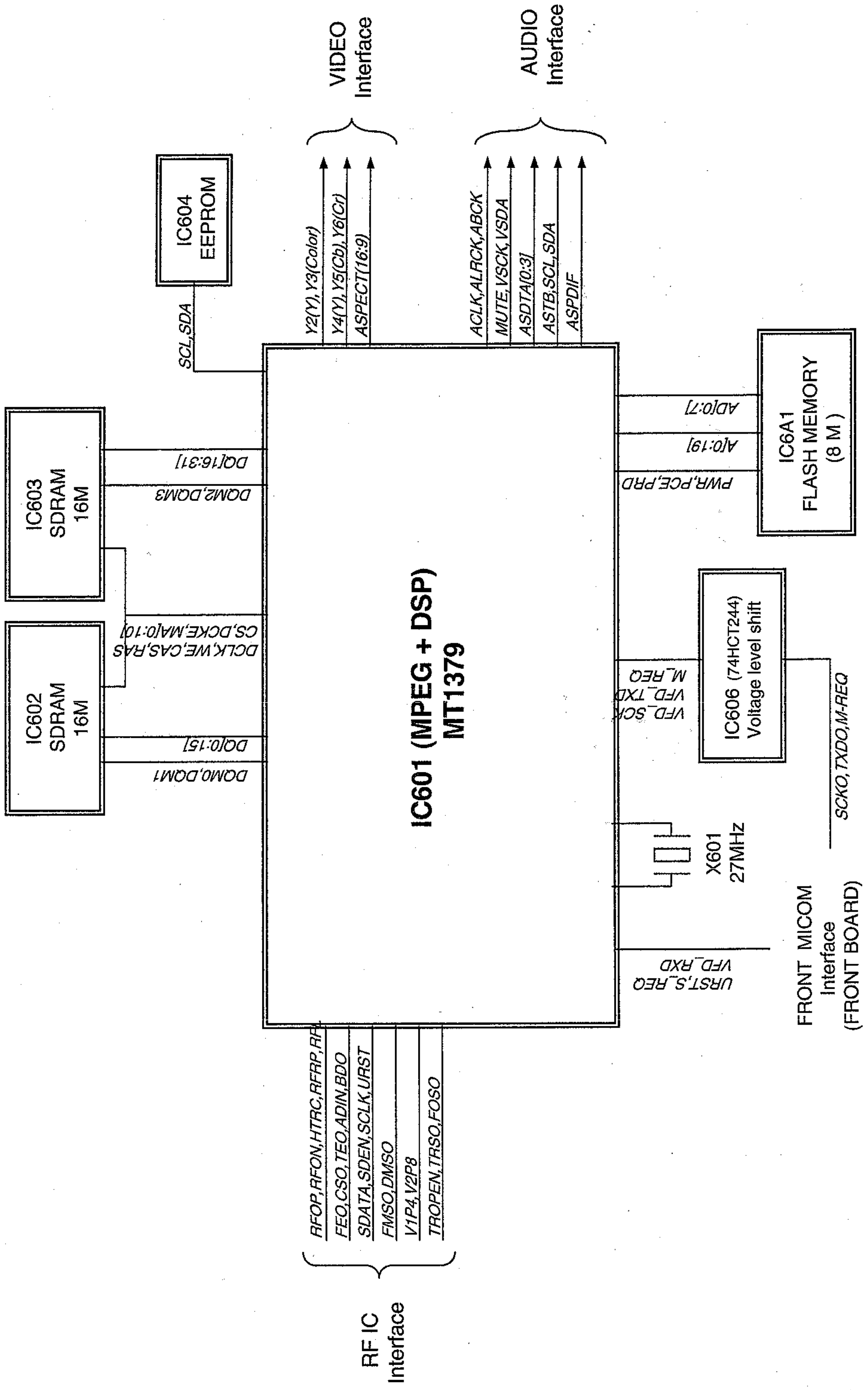
COMBI SCART
VC8806P1K'S

2. SERVO Block Diagram

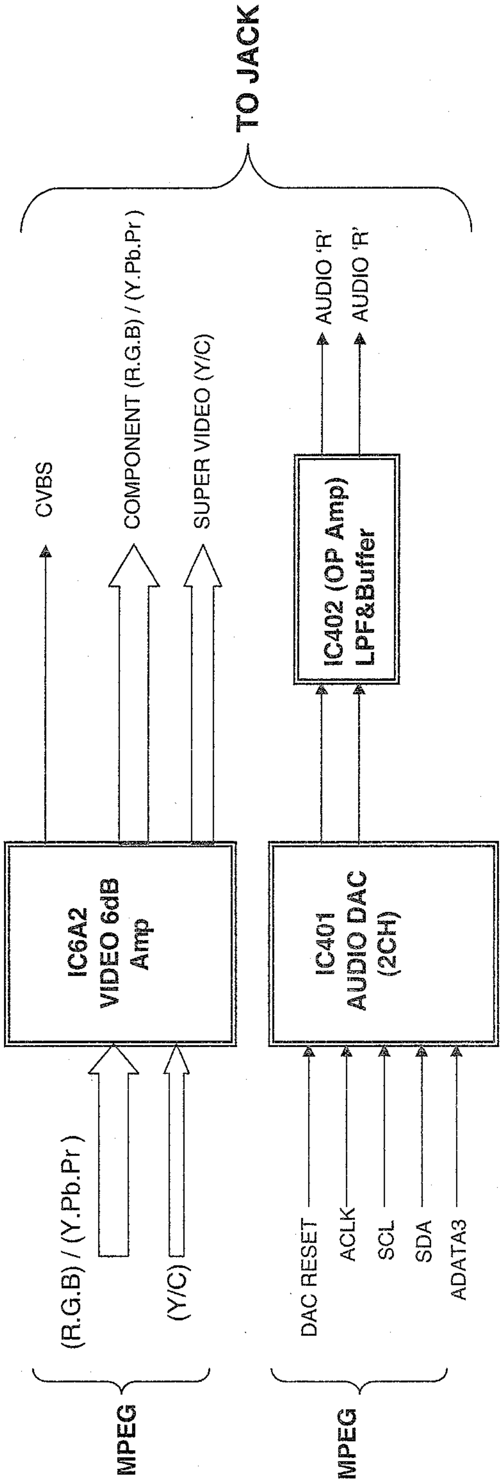

FLASH ROM
EEP ROM
RS232C(MTK)
AD[0:7]
A[0:19]
PRD#, PWR#
PCE#
SCL, SDA
RXD, TXD
X601
27MHz X-TAL
IC601
MT1379
DVDPLAYER
COMBO
CHIP
MA[0:10]
DQM0,DQM1
WE#,CAS#,RAS#
CS#,BA0,
DCLK
DCKE
DQ[16:31]
DQ[0:15]
IC603
GM72V161621
1M x 16bit
SDRAM
IC602
GM72V161621
1M x 16bit
SDRAM
SDEN, SDATA,
SCLK,PWMOUT2
RFOP,RFON
FEO,TEO,RFL,RFRP
BDO,CSO,HTRC,V2P8
ADIN
FOSO,TRSO,FMSO
DMSO,,TROPEN
IC201
MT1336E
RF Signal
Processor
TRCLOSE
STBY,V1P4
IC202
LA6560
Motor Driver
LIMIT,TRIN,TROUT
ALPC
LDO 1, LDO 2, IOA
MDI 1
V20
DVD: A,B,C,D, RFO
CD: A,B,C,D, E, F,RFO
F+, F-, T+, T-
SP+, SP-
SL+, SL-
LOAD+, LOAD-
PICK UP
M/D

COMBI SCART
VC8806P1K'S

3. MPEG & MEMORY Block Diagram


VIDEO Interface
AUDIO Interface
IC604 EEPROM
SCL,SDA
Y2(Y),Y3(Color)
Y4(Y),Y5(Cb),Y6(Cr)
ASPECT(16:9)
ACLK,ALRCK,ABCK
MUTE,VSCK,VSDA
ASDTA[0:3]
ASTB,SCL,SDA
ASPDIF
IC603 SDRAM 16M
DQ[16:31]
DQM2,DQM3
CS,DCKE,MA[0:10]
DCLK,WE,CAS,RAS
IC602 SDRAM 16M
DQ[0:15]
DQM0,DQM1
IC601 (MPEG + DSP) MT1379
AD[0:7]
A[0:19]
PWR,PCE,PRD
IC6A1 FLASH MEMORY (8 M)
IC606 (74HCT244) Voltage level shift
M_REQ
VFD_TXD
VFD_SCK
SCKO,TXDO,M-REQ
X601 27MHz
VFD_RXD
URST,S_REQ
FRONT MICOM Interface (FRONT BOARD)
RFOP,RFON,HTRC,RFRP,RF
FEO,CSO,TEO,ADIN,BDO
SDATA,SDEN,SCLK,URST
FMSO,DMSO
V1P4,V2P8
TROPEN,TRSO,FOSO
RF IC Interface

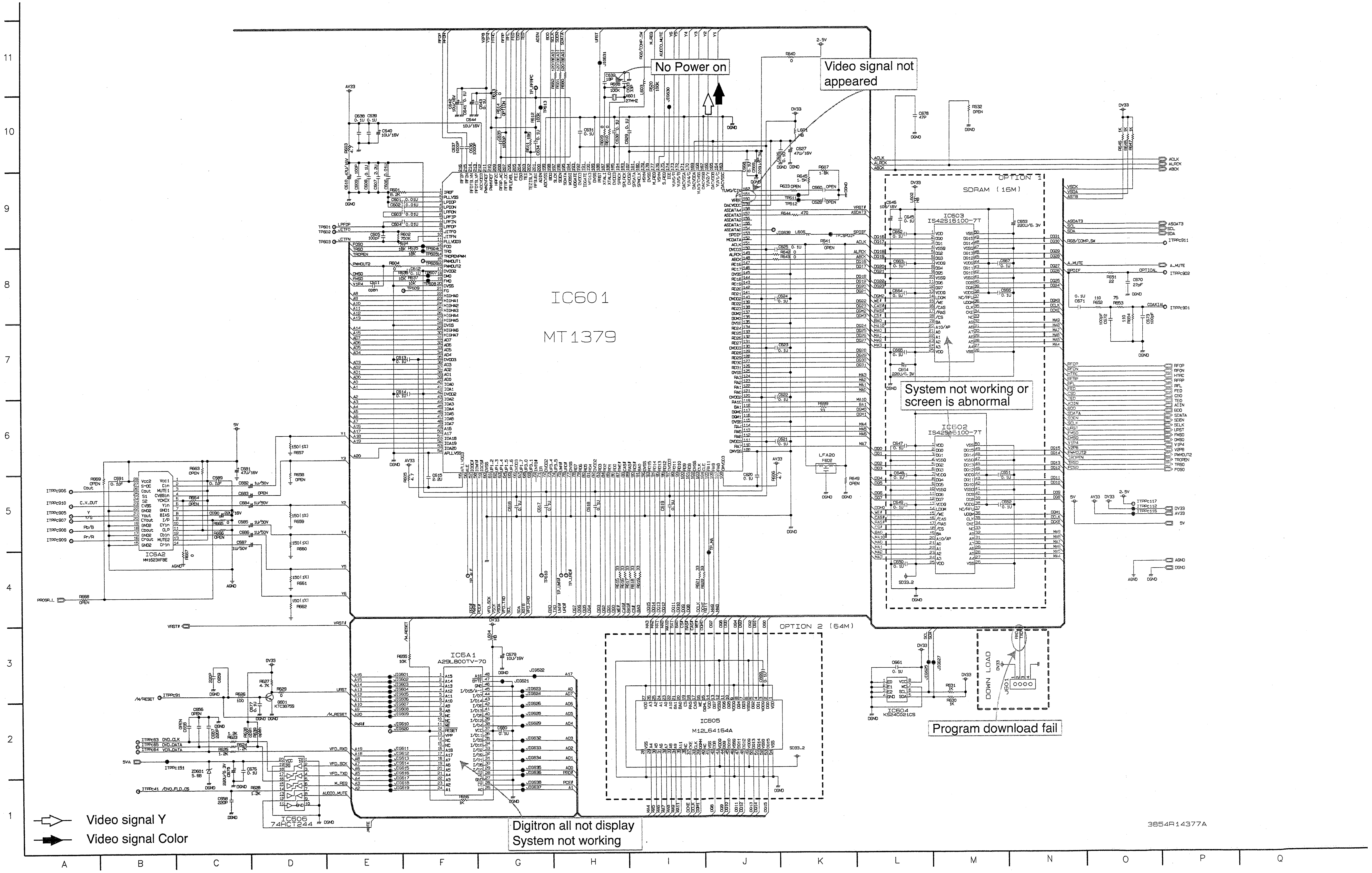
4. VIDEO & AUDIO Block Diagram


TO JACK
CVBS
COMPONENT (R.G.B) / (Y.Pb.Pr)
SUPER VIDEO (Y/C)
AUDIO 'R'
AUDIO 'R'
IC402 (OP Amp)
LPF&Buffer
IC6A2
VIDEO 6dB
Amp
IC401
AUDIO DAC
(2CH)
(R.G.B) / (Y.Pb.Pr)
(Y/C)
DAC RESET
ACLK
SCL
SDA
ADATA3
MPEG
MPEG

MEMO

CIRCUIT DIAGRAMS

1. SYSTEM CIRCUIT DIAGRAM


IC601
MT1379
IC603
IS42S16100-7T
OPTION 1
SDRAM (16M)
IC602
IS42S16100-7T
OPTION 2 (64M)
IC605
M12L64164A
IC6A1
A29L800TV-70
IC6A2
MM1523XFBE
IC606
74HCT244
IC604
KS24C021CS
DOWN LOAD
J501
3854R14377A
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
1
2
3
4
5
6
7
8
9
10
11

No Power on

Video signal not appeared

System not working or screen is abnormal

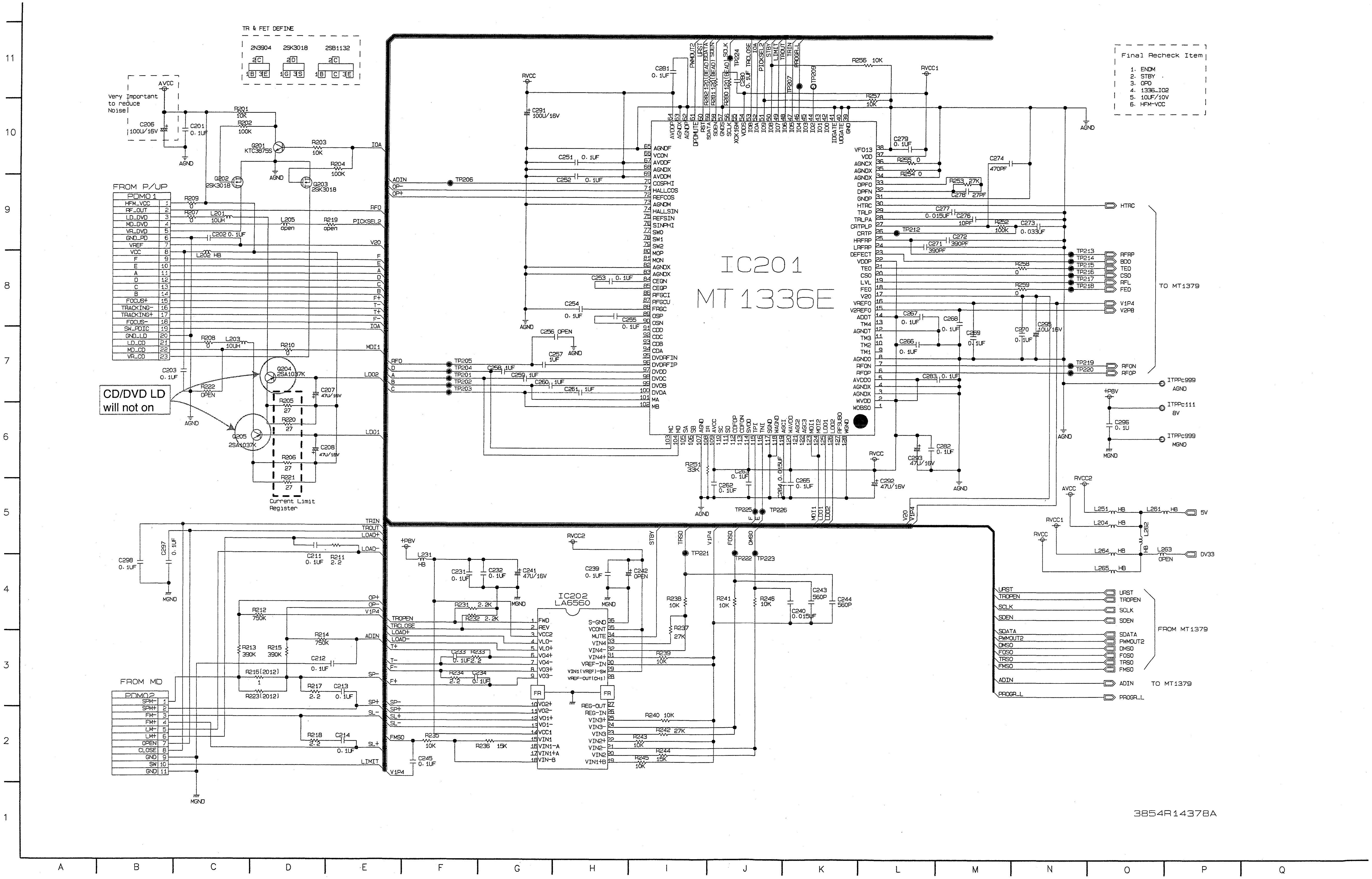
Program download fail

Digitron all not display
System not working

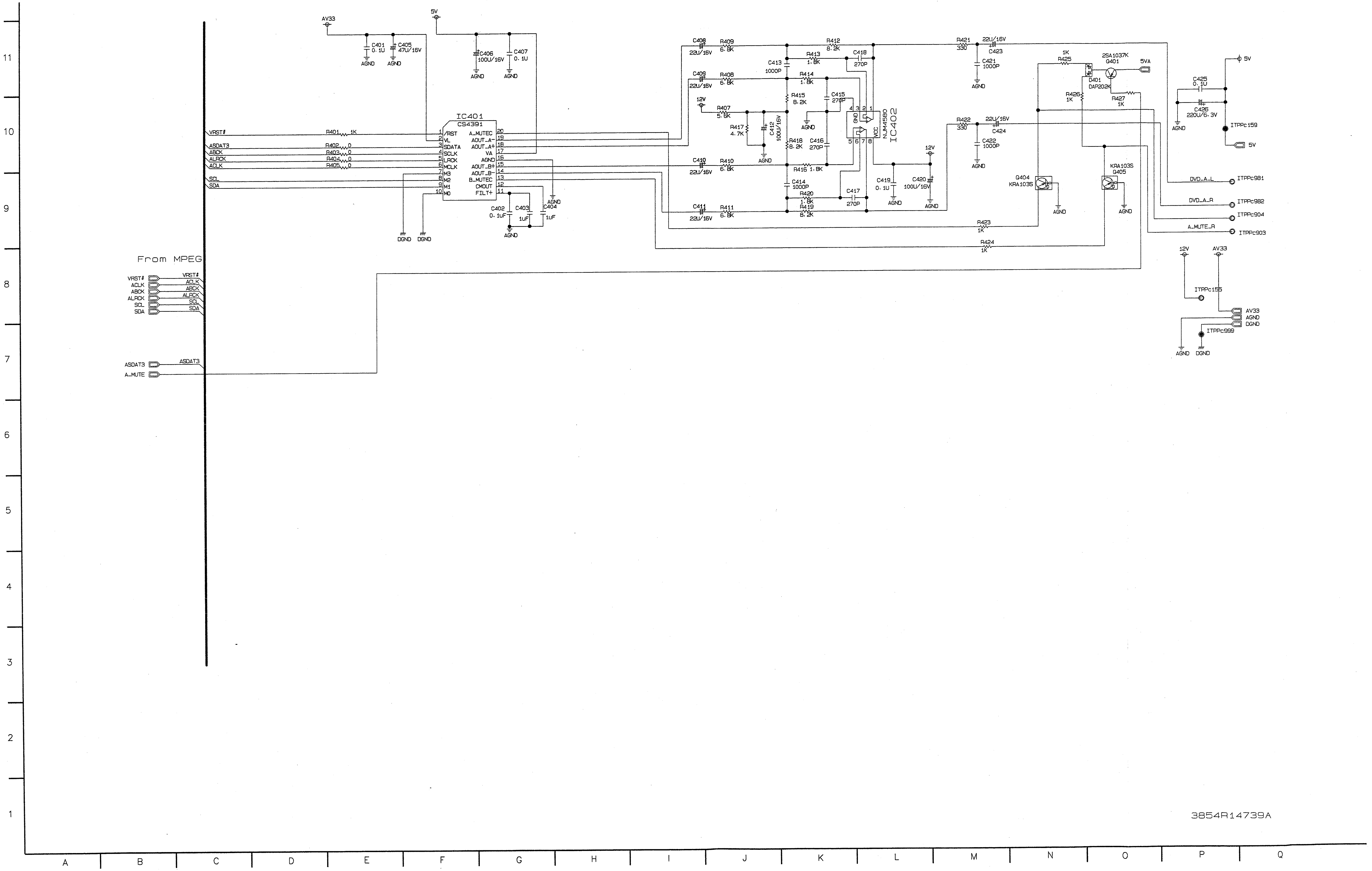
Video signal Y

Video signal Color

2. RF & DSP SERVO CIRCUIT DIAGRAM


TR & FET DEFINE
2N3904
2SK3018
2SB1132
Very Important to reduce Noise
AVCC
C206 100U/16V
C201 0.1UF
R201 10K
R202 100K
Q201 KTC3875S
R203 10K
R204 100K
Q202 2SK3018
Q203 2SK3018
AGND
IOA
FROM P/UP
PDMO1
HFM_VCC
RF_OUT
LD_DVD
MD_DVD
VR_DVD
GND_PD
VREF
VCC
F
E
A
D
C
B
FOCUS+
TRACKING-
TRACKING+
FOCUS-
SW_PDIC
GND_LD
LD_CD
MD_CD
VR_CD
R209
R207
L201 10UH
L205 open
R219 open
PICKSEL2
C202 0.1UF
L202 HB
V20
RFO
R208
L203 10UH
R210
MDI1
C203 0.1UF
Q204 2SA1037K
R222 OPEN
C207 47U/16V
LDO2
CD/DVD LD will not on
Q205 2SA1037K
R205 27
R220 27
R206 27
R221 27
C208 47U/16V
LDO1
Current Limit Register
ADIN
OP-
OP+
TP206
TP205
TP204
TP201
TP202
TP203
C258 1UF
C259 1UF
C260 1UF
C261 1UF
C257 1UF
C256 OPEN
RVCC
C291 100U/16V
C251 0.1UF
C252 0.1UF
C253 0.1UF
C254 0.1UF
C255 0.1UF
C281 0.1UF
IC201
MT1336E
R256 10K
R257 10K
RVCC1
C279 0.1UF
R255 0
R254 0
R253 27K
C278 27PF
C274 470PF
C277 0.015UF
C276 10PF
R252 100K
C273 0.033UF
TP212
C271 390PF
C272 390PF
R258 0
R259 0
C267 0.1UF
C268 0.1UF
C269 0.1UF
C266 0.1UF
C270 0.1UF
C295 10U/16V
C283 0.1UF
HTRC
TP213
TP214
TP215
TP216
TP217
TP218
RFRP
BDO
TEO
CSO
RFL
FEO
TO MT1379
V1P4
V2P8
TP219
TP220
RFON
RFOP
ITPPc999 AGND
ITPPc111 8V
ITPPc999 MGND
+P8V
C296 0.1U
MGND
R251 33K
C262 0.1UF
C263 0.1UF
C264 0.015UF
C265 0.1UF
C292 47U/16V
C293 47U/16V
C282 0.1UF
TP225
TP226
TP207
TP209
TP224
Final Recheck Item
1. ENDM
2. STBY
3. OPO
4. 1336_IO2
5. 10UF/10V
6. HFM-VCC
RVCC2
AVCC
L251 HB
L261 HB
5V
L204 HB
L262 HB
L264 HB
L263 OPEN
DV33
L265 HB
TRIN
TROUT
LOAD+
LOAD-
C298 0.1UF
C297 0.1UF
C211 0.1UF
R211 2.2
MGND
R212 750K
R213 390K
R215 390K
R214 750K
C212 0.1UF
R216(2012) 1
R223(2012)
R217 2.2
C213 0.1UF
R218 2.2
C214 0.1UF
FROM MD
PDMO2
SPM-
SPM+
FM-
FM+
LM-
LM+
OPEN
CLOSE
GND
SW
SP-
SP+
SL-
SL+
LIMIT
T+
T-
F-
F+
TROPEN
TRCLOSE
FMSO
V1P4
R235 10K
C245 0.1UF
R236 15K
L231 HB
C231 0.1UF
C232 0.1UF
C241 47U/16V
C239 0.1UF
C242 OPEN
R231 2.2K
R232 2.2K
C233 0.1UF
R233 2.2
R234 2.2
C234 0.1UF
IC202
LA6560
FWD
REV
VCC2
VLO-
VLO+
VO4+
VO4-
VO3+
VO3-
VO2+
VO2-
VO1+
VO1-
VCC1
VIN1
VIN1-A
VIN1+A
VIN-B
S-GND
VCONT
MUTE
VIN4
VIN4-
VIN4+
VREF-IN
VIN1(VREF)-SW
VREF-OUT(CH1)
REG-OUT
REG-IN
VIN3+
VIN3-
VIN3
VIN2+
VIN2-
VIN2
VIN1+B
FR
STBY
TRSO
FOSO
DMSO
TP221
TP222
TP223
R238 10K
R241 10K
R246 10K
C240 0.015UF
C243 560P
C244 560P
R237 27K
R239 10K
R240 10K
R242 27K
R243 10K
R244 15K
R245 10K
URST
TROPEN
SCLK
SDEN
SDATA
PWMOUT2
DMSO
FOSO
TRSO
FMSO
FROM MT1379
ADIN
PROGR_L
TO MT1379
3854R14378A
1
2
3
4
5
6
7
8
9
10
11
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q

3. AV/JACK CIRCUIT DIAGRAM



From MPEG
VRST#
ACLK
ABCK
ALRCK
SCL
SDA
ASDAT3
A_MUTE
AV33
5V
12V
C401 0.1U
C405 47U/16V
C406 100U/16V
C407 0.1U
AGND
DGND
IC401
CS4391
/RST
VL
SDATA
SCLK
LRCK
MCLK
M3
M2
M1
M0
A_MUTEC
AOUT_A-
AOUT_A+
VA
AGND
AOUT_B+
AOUT_B-
B_MUTEC
CMOUT
FILT+
R401 1K
R402 0
R403 0
R404 0
R405 0
C402 0.1uF
C403 1uF
C404 1uF
C408 22U/16V
C409 22U/16V
C410 22U/16V
C411 22U/16V
R407 5.6K
R408 6.8K
R409 6.8K
R410 6.8K
R411 6.8K
R412 8.2K
R413 1.8K
R414 1.8K
R415 8.2K
R416 1.8K
R417 4.7K
R418 8.2K
R419 8.2K
R420 1.8K
C412 100U/16V
C413 1000P
C414 1000P
C415 270P
C416 270P
C417 270P
C418 270P
C419 0.1U
C420 100U/16V
IC402
NJM4580
GND
VCC
R421 330
R422 330
C421 1000P
C422 1000P
C423 22U/16V
C424 22U/16V
R423 1K
R424 1K
R425 1K
R426 1K
R427 1K
2SA1037K
Q401
D401
DAP202K
5VA
Q404
KRA103S
KRA103S
Q405
C425 0.1U
C426 220U/6.3V
ITPPc159
ITPPc981
ITPPc982
ITPPc904
ITPPc903
ITPPc155
ITPPc999
DVD_A_L
DVD_A_R
A_MUTE_R
AV33
AGND
DGND
3854R14739A
1 2 3 4 5 6 7 8 9 10 11
A B C D E F G H I J K L M N O P Q

• CIRCUIT VOLTAGE CHART

	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
1	1.03	2.99	0	0	1.22	1.22	3.27	3.28	0	0	0	0								
2	5.11	5.08	0	0	0	0	1.18	1.26	0	0	2.59	2.55	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
3	0	0	8.04	8.01	0.96	0.9	1.1	1.52	0	0	0	0	0.08	0.16	3.28	3.29	5.52	5.49	5.09	5.08
4	0	0	0.12	0.06	2	2.06	0	0	0	0	2.59	2.56	1.82	0.45	3.28	3.28	5.52	5.48	2.43	2.42
5	5.11	5.07	0	0.06	0	1.51	0.66	1.07	3.28	3.29	0	0	2.84	0	0	1.65	5.51	5.47	5.09	5.08
6	0	1.95	3.64	3.69	1.48	1.47	0.85	1.12	3.28	3.29	3.24	3.23	2.83	3.12	1.63	1.64	0	0	1.45	0
7	0	0	3.62	3.61	0	1.56	3.27	3.28	0	0	0	0	0.69	0.26	1.64	1.65	5.51	5.48	0	0
8	0	0	3.64	3.53	3.2	1.52	0.51	0.97	3.28	3.29	0.14	0.08	1.72	0.25	1.59	1.61	5.51	5.48	1.45	1.69
9	5.11	0	3.6	3.76	0.12	0.06	3.06	0			0	0	1.92	0.9	0	0	5.52	5.47	0	0
10	5.11	5.08	3.62	2.43	0.12	0.06	0	0			0	0	1.7	1.45	3.28	0	12.03	12.03	2.47	2.46
11	5.11	5.08	3.63	4.85	3.25	3.25	0.06	0.98			0.15	0.09	0	0	3.28	3.29			0	0
12	0	0	3.62	3.72	1.41	1.49	3.18	0.87			0	0	0	0	0	0			1.14	1.76
13	5.11	0	3.64	3.57	1.41	1.41	3.27	3.28			0.15	0.08	3.27	3.29	5.01	5.01			0	0
14	5.11	5.08	8.04	8.01	0	0	2.94	2.56			5.19	5.19	3.56	3.55	2.31	2.31			2.42	2.42
15	2.84	2.81	1.45	1.48	1.42	1.42	0.47	0.42			0.14	0.09	3.29	3.29	4.96	0			5.09	5.08
16	1.45	1.43	0.27	1.39	3.3	0	2.93	3.01			5.25	5.24	0	0	1.42	2.41			2.43	2.42
17	2.08	2.07	0.29	1.32	2.53	2.53	3.21	3.22			0.15	0.08	0.23	0.06	2.4	2.39			0	0
18	1.37	1.42	1.45	1.43	1.42	2.27	2.87	2.95			5.23	5.23	0	0	0	0			2.49	2.47
19	0.69	2.3	1.45	1.43	1.42	1.39	0.15	1.32			0	0	0	0	5.11	5.09			0	0
20	2.4	0	1.45	0.82	0	0	0	0.05			5.25	5.25	0	0.87	2.41	2.41			2.48	2.47
21	2.35	0	1.45	1.43	2.61	2.58	3.09	1.32					1.98	2.64	2.43	2.43			0	0
22	5.11	5.08	1.45	1.43	0.75	1.46	3.09	1.32					2.28	2.18	0	0			1.18	2.3
23	0	0	1.47	1.37	2.83	1	3.09	1.32					2.13	1.96					1.76	2.17
24	2.59	3.2	1.45	1.43	1.9	0.89	3.09	1.33					1.67	2.01					0	0
25	0.19	1.88	1.45	1.43	1.72	0.39	3.27	3.29					1.99	1.72					1.76	2.24
26	1.58	0	0.95	0.91	0.68	0.31	0	0					1.93	2.19					0	0
27	2.56	3.13	0	0	2.84	3.16	0.15	1.36					2.05	1.94					0	0
28	2	2.01	1.45	1.43	0	0	1.84	2.36					0	0					0	0
29	2	2.06	5.15	5.11	2.85	0.66	1	2.32					0	0					0.06	0.05
30	2.96	1.52	1.45	1.43	1.83	0.49	0.54	1.75					0	0					5.09	0
31	0	0	1.45	1.43	0.91	1.39	0.06	0.06					1.49	2.03						
32	0.06	2.07	1.45	1.43	1.43	1.2	0.05	0.06					0.16	1.07						
33	0.07	2.07	1.46	1.45	1.51	1.57	0	0					1.96	1.25						
34	0	0	5.08	5.06	1.51	1.43	0.73	1.26					0.16	1.1						
35	0	0	5.15	5.11	3.3	3.29	1.48	1.55					0.99	2.2						
36	0	0	0	0	0.81	1.26	2.91	2.53					1.17	1.07						
37	5.13	0			1.45	1.02	0.07	0					0.79	1.82						
38	0	0			1.82	1.6	3.27	3.28					0.15	1.07						
39	0	0			1.2	1.5	1.06	1.05					3.29	3.3						
40	0	0			2	2.06	0.47	0.98					1.93	3.09						
41	0	0			2.17	1.95	0	0					0.16	1.07						
42	5.12	5.09			2.53	2.52	0	0.6					1.5	2.2						
43	5.12	5.09			1.96	1.9	1.12	1.24					0.16	1.07						
44	5.12	5.09			1.79	1.9	3.27	3.28					1.21	2.64						
45	5.12	5.09			0.8	1.72	1.21	0.99					0.16	1.08						
46	5.12	5.09			0.8	1.96	1.31	1.34					1.64	1.48						
47	0	0			0.8	1.84	0	0					2.05	2.06						
48	5.12	5.09			3.3	2.63	1.43	1.44					0	0						
49	5.12	0			0	0.13	0.88	1.01					0	0						
50	5.08	5.06			0	0.07	0	0					0.07	0.13						
51	5.09	5.07			0	0														
52	5.1	0			0	0														
53	0	0			0	0														
54	5.13	0			0	0														
55	0.09	0.2			3.25	3.27														
56	1.61	0			1.21	1.18														
57	0	0			0	0														
58	0	0			3.29	3.29														
59	0	0			0	0														
60	0	0			0	0														
61	3.28	0			2.59	2.57														
62	0	0			2.58	2.58														
63	0	0			0	0														
64	0	0			2.59	2.56														
65	0	0			3.29	3.29														
66	0.26	0			3.3	3.29														
67	5.12	5.08			3.29	3.29														
68	0	0			2.57	2.56														
69	5.12	0			5.19	5.18														
70	3.21	2.03			2.59	2.57														
71	3.46	2.2			0.12	0.08														
72	2.81	0			2.53	2.52														
73	0	0			2.59	2.57														
74	0.21	0.09			3.29	3.29														
75	0.22	0			2.61	2.61														
76	0	0.1			3.27	3.24														
77	0.21	0.09			0	0														
78	0.23	0.09			0.94	1.04														
79	0.21	0.08			0.78	1.06														
80	0.23	0.08			0.89	1.15														

	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
81	0.22	0			0.99	1.34														
82	0	0			2.52	2.52														
83	0	0			3.09	1.33														
84	0.07	0			0.37	1.16														
85	0.07	2.27			3.08	1.1														
86	1.97	0			3.07	1.08														
87	1.96	1.9			0.59	1.04														
88	1.54	1.71			1.57	2.53														
89	0.19	2.22			3.2	3.13														
90	0.21	0			2.77	2.53														
91	0.22	0.06			0.22	1.68														
92	0.22	0			0	0														
93	0.23	0.06			3.32	1														
94	0.23	0.06			0.16	1.58														
95	2.28	0			3.31	1.62														
96	2.28	2.25			3.3	1.08														
97	2.27	1.23			3.3	3.29														
98	2.27	2.23			3.32	1.62														
99	2.27	2.23			0.16	1.09														
100	2.26	2.23			3.32	1.27														
101	2.08	2.17			3.3	1.32														
102	2.07	2.17			0	0														
103	2.07	2.18			1.56	1.55														
104	2.08	0			0.94	1.25														
105	0.14	0.15			0.41	0														
106	0.14	0.16			0.05	0.06														
107	0	0			0	0.06														
108	1.28	1.28			3.27	3.26														
109	5.18	5.05			0	0														
110	0.14	0.16			0.19	1.74														
111	0.15	0.15			3.3	3.29														
112	0.13	0.16			0.18	1.62														
113	0.14	0.15			2.98	2.38														
114	5.1	5.05			3.02	1.48														
115	2.07	2.09			0	0														
116	2.06	2.09			2.86	3.01														
117	0	0			2.86	2.54														
118	0	0			0	0														
119	0	0			0	2.5														
120	5.1	5.05			2.55	2.51														
121	0.13	0.15			3.03	1.4														
122	0.14	0.15			3.03	1.4														
123	0	0.18			0.22	1.39														
124	0	0.18			0.22	0.34														
125	5.08	5.03			0	0														
126	5.08	3.16			3.31	0.98														
127	0.06	2.08			0.26	1.64														
128	0	0			3.31	1.53														
129					3.3	1.15														
130					3.3	3.29														
131					3.31	1.49														
132					0.16	0.89														
133					3.3	0														
134					3.3	1.07														
135					0	0														
136					2.86	2.53														
137					2.86	2.53														
138					0.07	0.86														
139					0.09	0.99														
140					0.07	2.51														
141					0.07	0.94														
142					0.09	1.13														
143					0.07	1.19														
144					0.09	1.07														
145					0.09	0														
146					0	1.51														
147					0.09	1.25														
148					0.07	1.64														
149					0.06	0														
150					0	1.65														
151					0.07	3.29														
152					0	1.6														
153					0	1.64														
154					0	1.44														
155					0	0														
156					0	0														
157					0	1.63														
158					0	3.29														
159					0	3.27														
160					0	1.27														

	IC201(MT1336E)		IC202(MOTOR)		IC501(MT1379)		IC502(SDRAM)		IC505(EEPROM)		IC510(BUFFER)		IC5A1(FLASH)		IC401(CS4391)		IC402(AMP)		IC5C1(MM1623XFBE)	
PIN	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**
161					0	1.27														
162					0	2.35														
163					0	0														
164					0	0.73														
165					0	3.27														
166					0	0.5														
167					0	0														
168					0	0.53														
169					0	3.27														
170					0	0.59														
171					0	0														
172					3.01	0.72														
173					0	0.72														
174					0	0														
175					0	2.73														
176					0	3.13														
177					0	3.13														
178					0	3.25														
179					0	0														
180					0	0														
181					2.04	2.64														
182					0	2.52														
183					0	0														
184					0	0.09														
185					0	3.26														
186					-	-														
187					0	0.08														
188					0	0														
189					0	0														
190					0	0														
191					0.23	0														
192					0	3.29														
193					0	0														
194					0	0														
195					0	0														
196					0	0														
197					0	1.63														
198					0	0														
199					0	0														
200					0	2.15														
201					0	1.44														
202					0	1.44														
203					0	1.43														
204					0	1.43														
205					0	1.42														
206					0	2.1														
207					0	2.07														
208					0	1.41														
209					0	1.52														
210					0	1.43														
211					0	2.81														
212					0	3.28														
213					0	0.12														
214					0	0.12														
215					1.02	1.43														
216					0	1.43														

	Q201		Q202		Q203		Q204	
	STOP	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**
E	0	0	0	0	0	0	5.14	4.34
C	0	5.09	0	0	0	0.19	0	2.42
B	0.68	0	0	5.04	5.04	0	5.08	3.64
	Q205		**Q501**		**Q6401**			
	STOP	**PLAY**	**STOP**	**PLAY**	**STOP**	**PLAY**		
E	5.14	5.10	0	5.17	0			
C	0.5	0	0	0	0	0.13		
B	5.08	5.05	0.83	0.83	5.11	0		

MEMO

MEMO

SECTION 4 MECHANISM (D-37)

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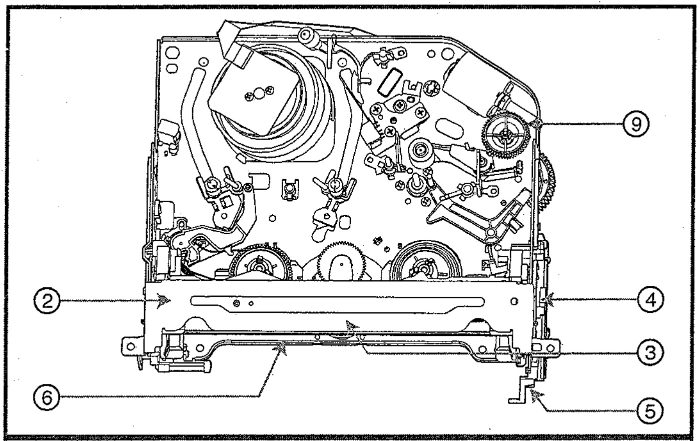
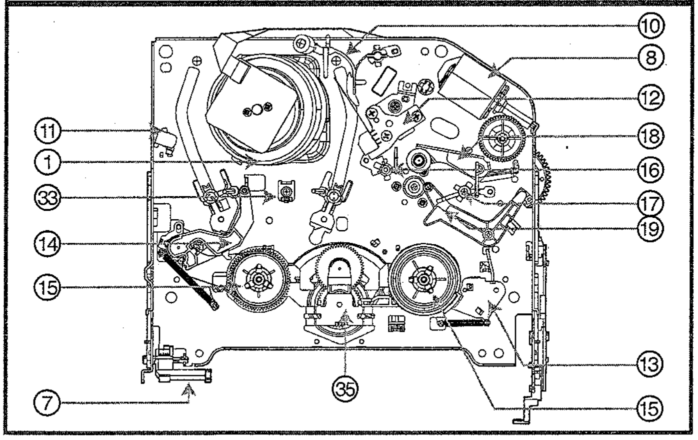
POSITION DRAWING OF DECK MECHANISM PARTS

• Top View

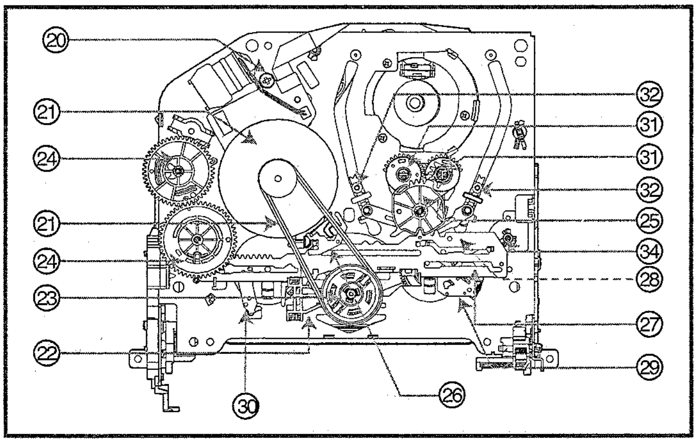




Parts firstly Disassembled	Order Of Disassembled	Part	Fixing Type	Ref. Drawings	Position
	1	Drum Assembly	3 screws	A-1	T
	2	Plate Top	2 hooks	A-2	T
2	3	Holder Assembly CST	6 chasses	A-2	T
2,3	4	Gear Assembly Rack F/L	1 hook	A-2	T
2,3,4	5	Opener Door	Chassis Hole	A-2	T
2,3,4,5	6	Arm Assembly F/L	Chassis Hole	A-2	T
	7	Lever Assembly S/W	Chassis Hole, 1 hook	A-2	T
	8	Motor Assembly L/D	1 screw	A-3	T
	9	Gear Wheel	2 hooks	A-3	T
	10	Arm Assembly Cleaner	Chassis Embossing	A-3	T
	11	Head F/E	Chassis Embossing	A-3	T
	12	Base Assembly A/C Head	1 screw	A-3	T
2,3	13	Brake Assembly T	1 hook	A-4	T
2,3	14	Arm Assembly Tension	1 hook	A-4	T
2,3,13,14	15	Reel S / Reel T	Shaft	A-4	T
	16	Base Assembly P4	Chassis Embossing	A-5	T
	17	Opener Lid	Chassis Embossing	A-5	T
17	18	Arm Assembly Pinch	Shaft	A-5	T
17	19	Arm T/up	1 hook	A-5	T
	20	Supporter, capstan	Chassis Hole	A-6	B
17,18	21	Belt Capstan/Motor Capstan	3 screws	A-6	B
	22	Lever F/R	Locking Tab	A-6	B
21, 22	23	Clutch Assembly D37	Washer	A-6	B
	24	Gear Drive/Gear Cam	Washer/Hook	A-7	B
	25	Gear Sector	Hook	A-7	B
21	26	Brake Assembly Capstan	Chassis Hole	A-7	B
21,22,23, 24,2526	27	Plate Slider	Chassis Guide	A-7	B
21,22,23, 24,2526,27	28	Lever Tension	1 Hook	A7	B
21,22,23, 24,2526,27	29	Lever Spring	1 Hook	A-7	B
21,22,23, 24,2526,27	30	Lever Brake	1 Hook	A-7	B
25	31	Gear Assembly P2/ Gear Assembly P3	Bass	A-8	B
2, 3, 14, 25, 31	32	Base Assembly P2 /Base Assembly P3	6 Chasses	A-8	B
25, 31	33	Base Loading	3 Hooks	A-8	B
2,3,14	34	Base Tension	Chassis Embossing	A-9	T
	35	Arm Assembly Idler Jog	Locking Tab	A-9	T

T:Top, B:Bottom

• Bottom View



NOTE : Assembly order is a reverse of disassembly order.

(1) For assembly, check the assembly mode is accurate.
(2) Parts firstly disassembled indicate parts firstly disassembled in disassembly of related parts.

DISASSEMBLY AND ASSEMBLY OF DECK MECHANISM

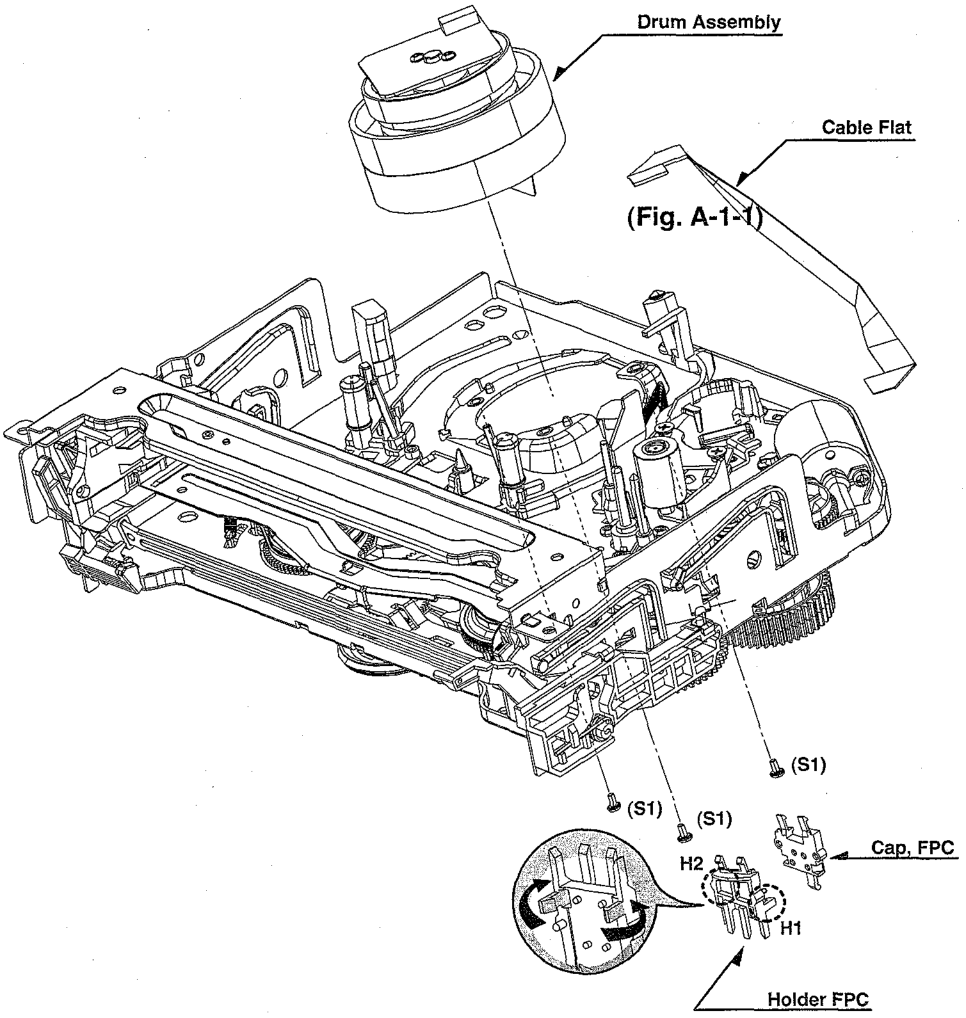
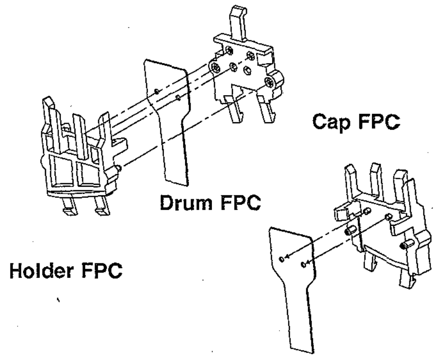

Drum Assembly
Cable Flat
(Fig. A-1-1)
(S1)
(S1)
(S1)
Cap, FPC
H2
H1
Holder FPC

Fig. A-1

1. Disassembly of Drum Assembly (Figure A-1)

1) Separate cable flat from the Drum FPC and the Capstan Motor.
2) Release 3 screws (S1) on the bottom side of the chassis, and separate the drum assembly.
3) Release the hooks (H1, H2) and separate both the holder FPC and the Cap FPC (disassemble if necessary).

Cautions in assembly of FPC


Cap FPC
Drum FPC
Holder FPC

Assembly shape seen in the reverse direction

DISASSEMBLY AND ASSEMBLY OF DECK MECHANISM

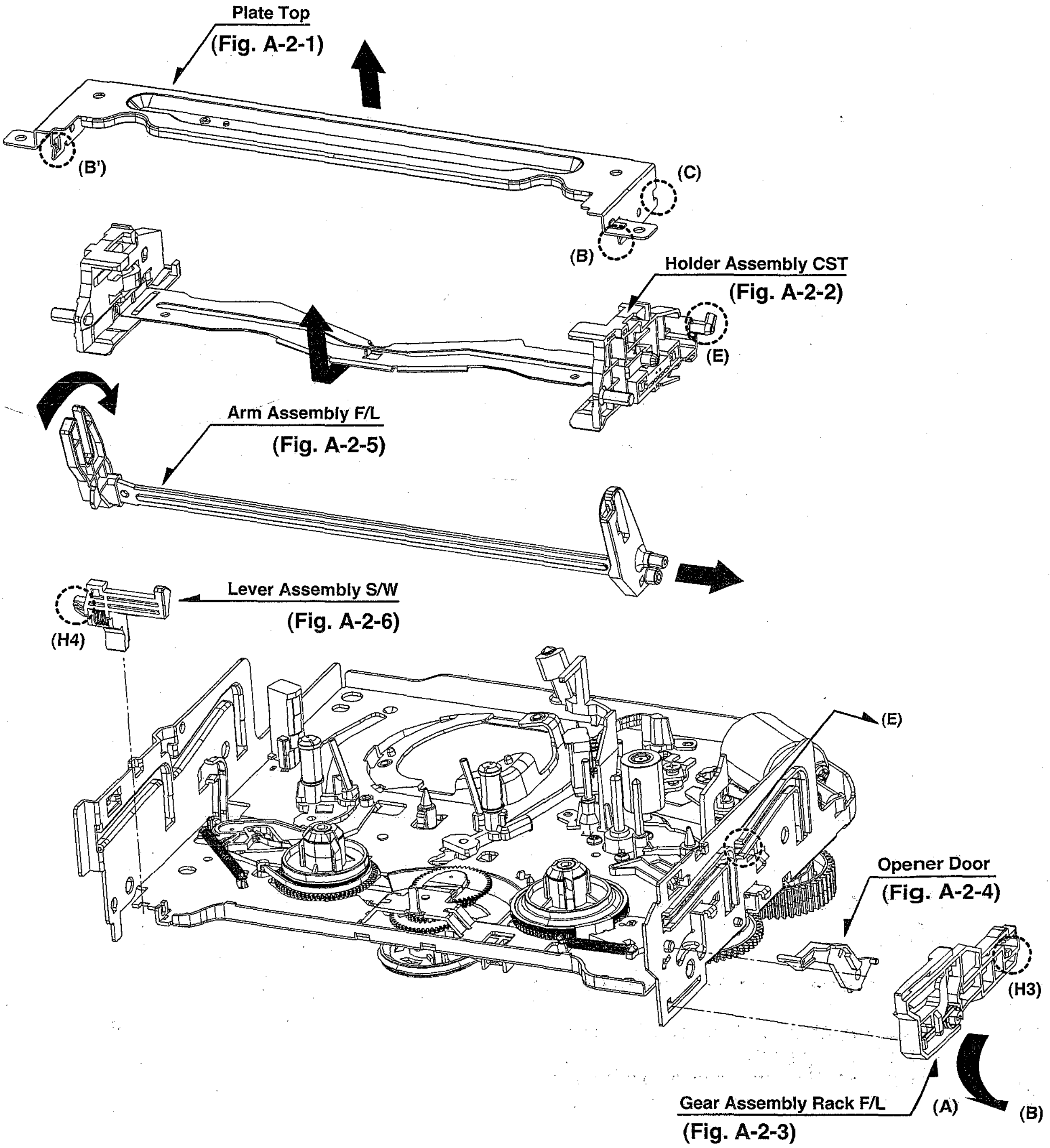


Plate Top
(Fig. A-2-1)
(B')
(C)
(B)
Holder Assembly CST
(Fig. A-2-2)
(E)
Arm Assembly F/L
(Fig. A-2-5)
Lever Assembly S/W
(Fig. A-2-6)
(H4)
(E)
Opener Door
(Fig. A-2-4)
(H3)
Gear Assembly Rack F/L
(Fig. A-2-3)
(A)
(B)

Fig. A-2

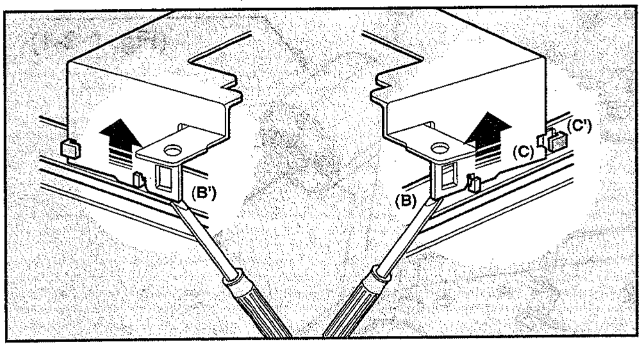
DISASSEMBLY AND ASSEMBLY OF DECK MECHANISM

2. Disassembly of Plate Top (Fig. A-2-1)

1) Separate the right part while leaning back the (B) part of the plate top toward the arrow direction.
2) Separate the left part while leaning back the (B') part of the plate top toward the arrow direction.
(Tool used: Tool such as (-) driver, auger, etc with pointed or flat end)

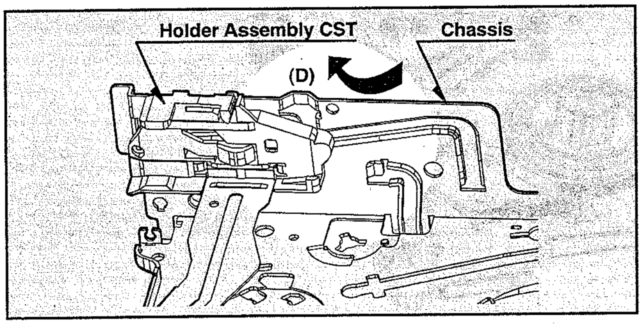
CAUTIONS

Assemble while pressing the (C), (C') part after corresponding them as in drawing.



3. Holder Assembly CST (Fig. A-2-2)

1) Firstly separate the left part from the groove on the (D) part of chassis while moving the holder assembly CST toward the arrow direction.



2) Separate the right part from each groove of chassis

CAUTIONS

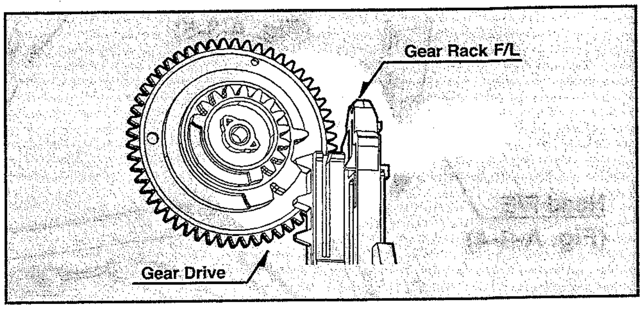
Assemble by inserting the left part after firstly inserting the (E) part of the holder assembly CST into the groove on the (E') part of chassis.

4. Disassembly of Gear Assembly Rack F/L (Fig. A-2-3)

1) Separate the hook (H3) while leaning ahead the hook (3) after moving the gear assembly rack F/L toward the arrow (A) direction.
2) Separate the gear assembly rack F/L toward the arrow (B) direction.

CAUTIONS

For the assembly, correspond the gear part of gear assembly rack F/L to the gear drive.



5. Opener Door (Fig. A-2-4)

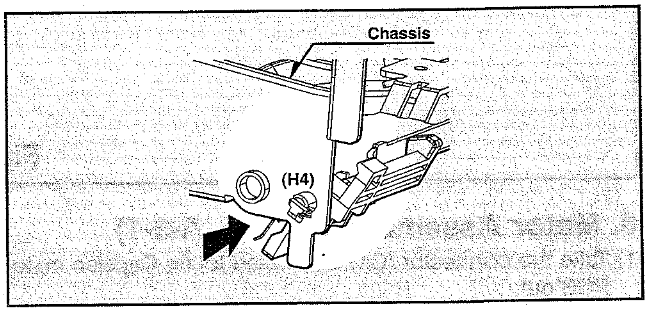
1) Separate the opener door ahead from the guide hole of chassis while turning it clockwise.

6. Arm Assembly F/L (Fig. A-2-5)

1) Firstly separate the left part of the arm assembly F/L from the groove of chassis while pushing the arm assembly F/L toward the arrow direction.
2) Separate the right part from the groove of chassis.).

7. Lever Assembly S/W (Fig. A-2-6)

1) Separate the lever assembly S/W while pushing it toward the arrow direction after removing the hook (4) on the left side of chassis.



DISASSEMBLY AND ASSEMBLY OF DECK MECHANISM

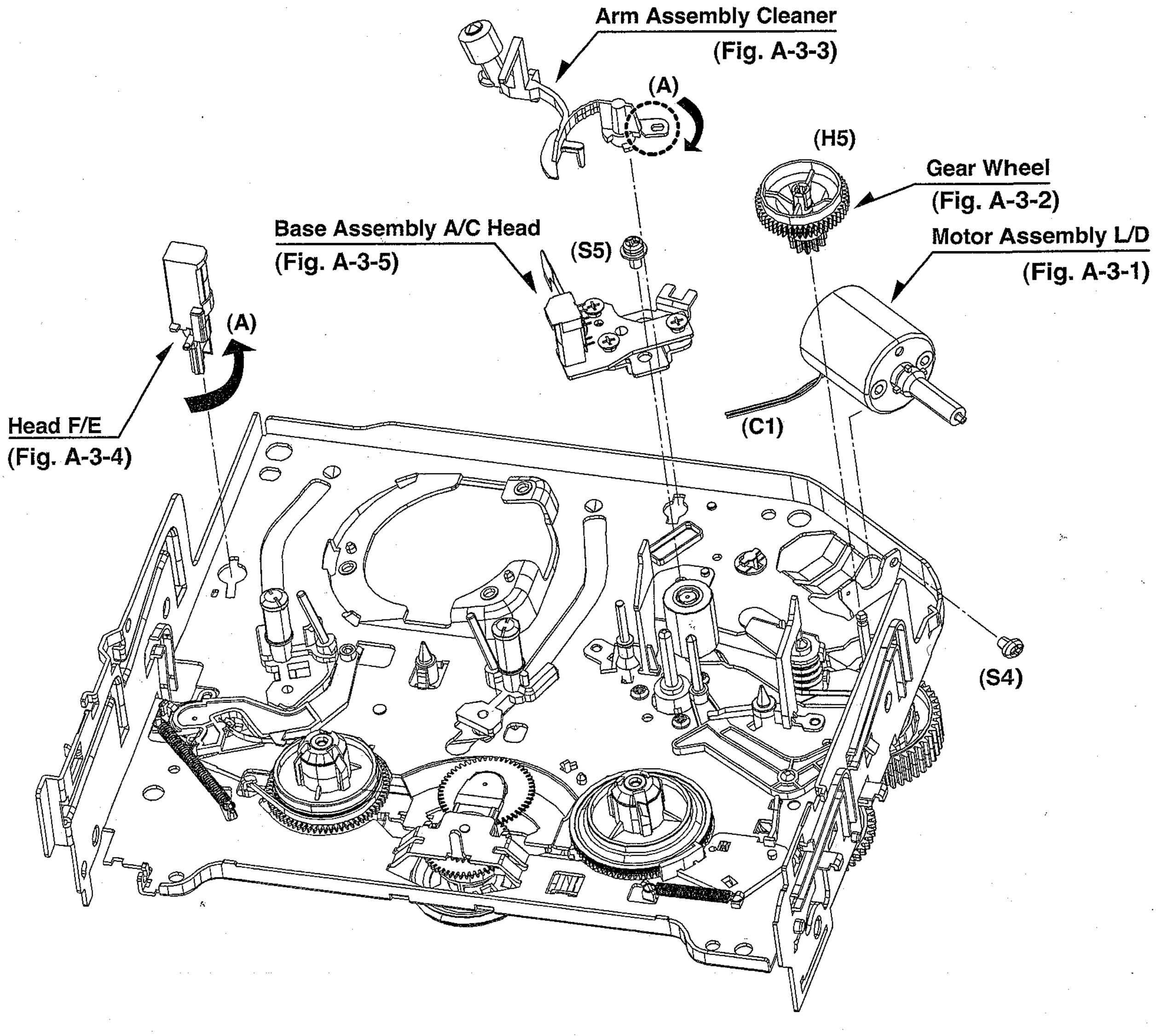

Arm Assembly Cleaner
(Fig. A-3-3)
(A)
(H5)
Gear Wheel
(Fig. A-3-2)
Motor Assembly L/D
(Fig. A-3-1)
Base Assembly A/C Head
(Fig. A-3-5)
(S5)
(A)
Head F/E
(Fig. A-3-4)
(C1)
(S4)

Fig. A-3

8. Motor Assembly L/D (Fig. A-3-1)

1) Take the connector (C1) connected to the Capstan motor PCB out.
2) Remove a screw (S4) of the chassis (S4) and step backward, and disassemble it while holding it up.

9. Gear Wheel (Fig. A-3-2)

1) Release the hook (H5) of the gear wheel and disassemble it upward.

10. Arm Assembly Cleaner (Fig. A-3-3)

1) Separate the (A) part of Fig. A-3-1 from the embossing of chassis, and hold it up while turning it anti-clockwise.

11. Head F/E (Fig. A-3-4)

1) Separate the (A) part of the head F/E from the embossing of chassis, and hold it up while turning it anti-clockwise.

12. Base Assembly A/C Head (Fig. A-3-5)

1) Release a screw (S5) and disassemble while holding it up.

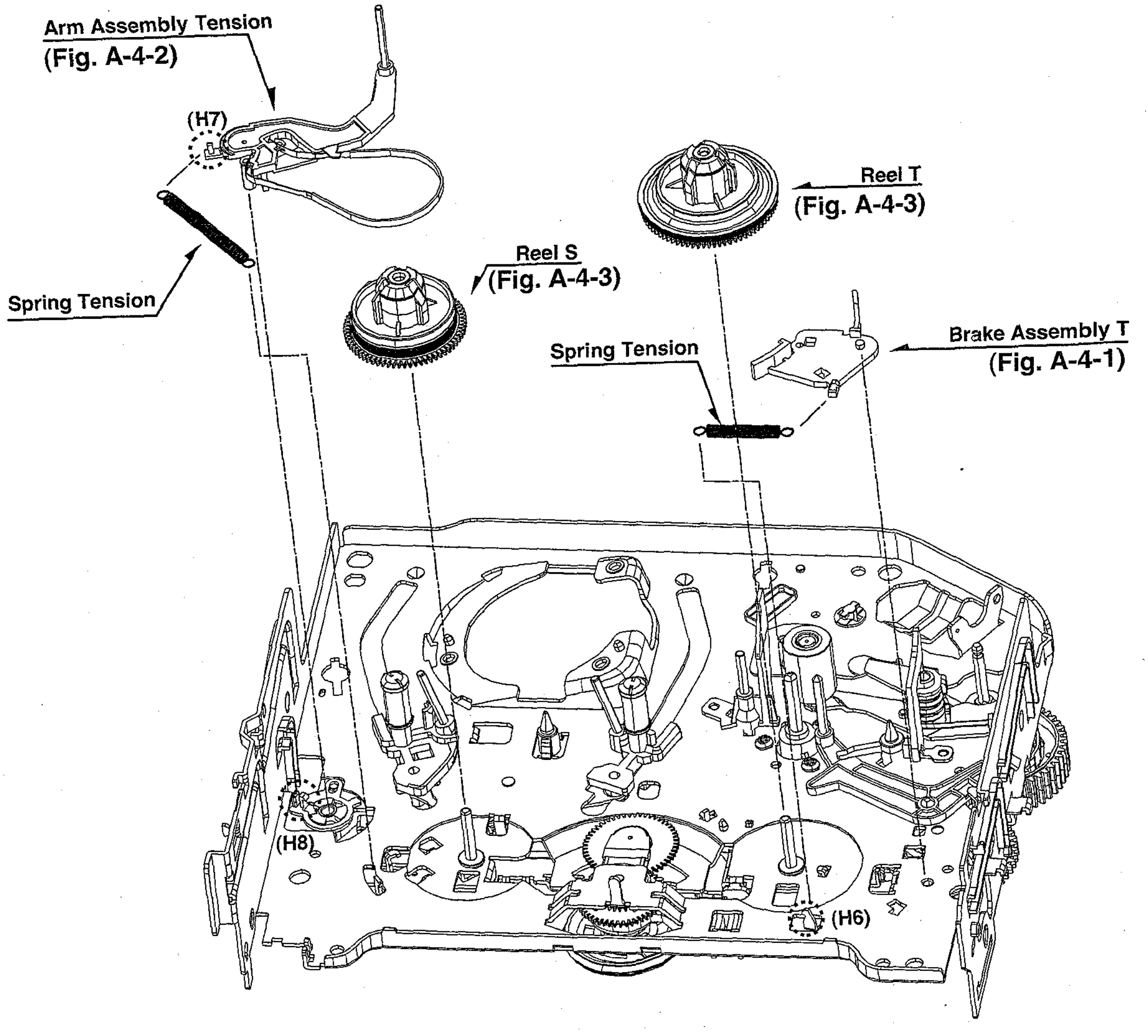

Arm Assembly Tension
(Fig. A-4-2)
(H7)
Spring Tension
Reel S
(Fig. A-4-3)
Reel T
(Fig. A-4-3)
Spring Tension
Brake Assembly T
(Fig. A-4-1)
(H8)
(H6)

Fig. A-4

13. Brake Assembly T (Fig. A-4-1)

1) Release the spring tension from the lever spring hook (H6).
2) Disassemble the brake assembly T while holding it upward.

14. Arm Assembly Tension (Fig. A-4-2)

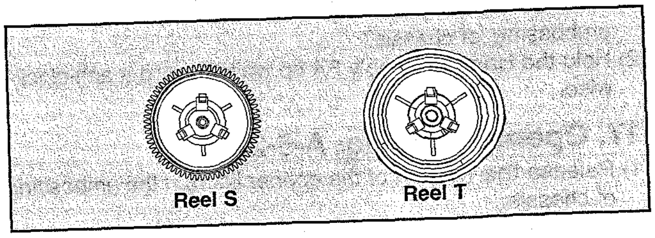
1) Release the spring tension the hook (H7) from the arm assembly tension.
2) After releasing the hook (H8) of the base tension, separate it while holding it up.

CAUTIONS

Spring used for both brake assembly T and arm assembly tension is used (2EA used).

15. Reel S/Reel T (Fig. A-4-3)

1) Disassemble the reel S/ reel T while holding it up (comparison between Reel S and Reel T)


Reel S
Reel T

DISASSEMBLY AND ASSEMBLY OF DECK MECHANISM

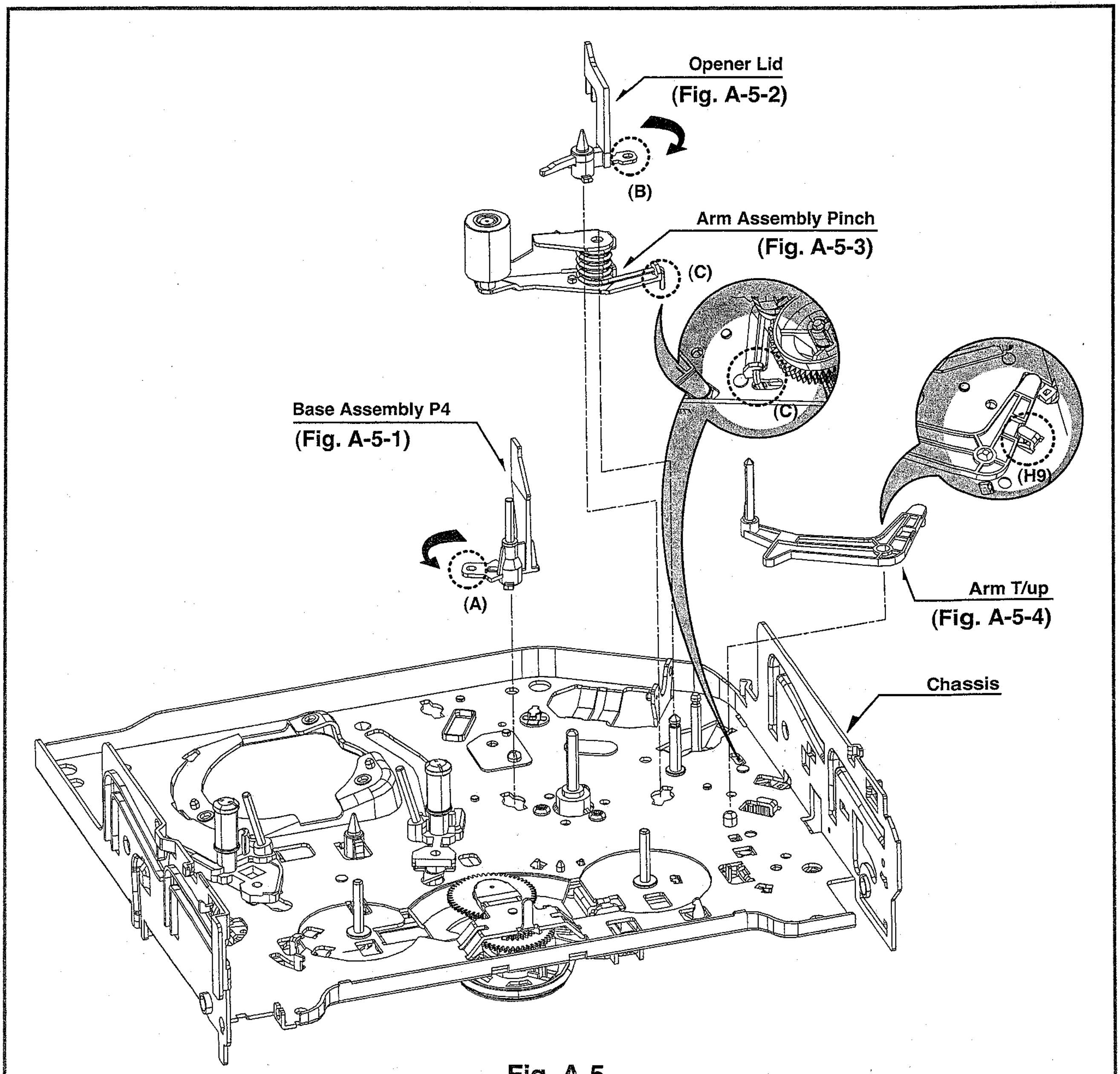

Opener Lid
(Fig. A-5-2)
(B)
Arm Assembly Pinch
(Fig. A-5-3)
(C)
(C)
Base Assembly P4
(Fig. A-5-1)
(A)
(H9)
Arm T/up
(Fig. A-5-4)
Chassis

Fig. A-5

16. Base Assembly P4 (Fig. A-5-1)

1) Release the (A) part of the base assembly P4 from the embossing of chassis.
2) Hold the base assembly P4 up while turning it anti-clockwise.

17. Opener Lid (Fig. A-5-2)

1) Release the (B) part of the opener lid from the embossing of chassis.
2) Disassemble the opener lid upward while turning it anti-clockwise.

18. Arm Assembly Pinch (Fig. A-5-3))

1) Hold the arm assembly pinch up.

19. Arm T/up (Fig. A-5-4)

1) Turn the arm T/up to release the anchor jaw (H9) part of chassis and then hold it upward.

CAUTIONS

For the assembly, check the (C) part of the arm assembly pinch is assembled as in drawing.

- REVERSE THE MECHANISM.

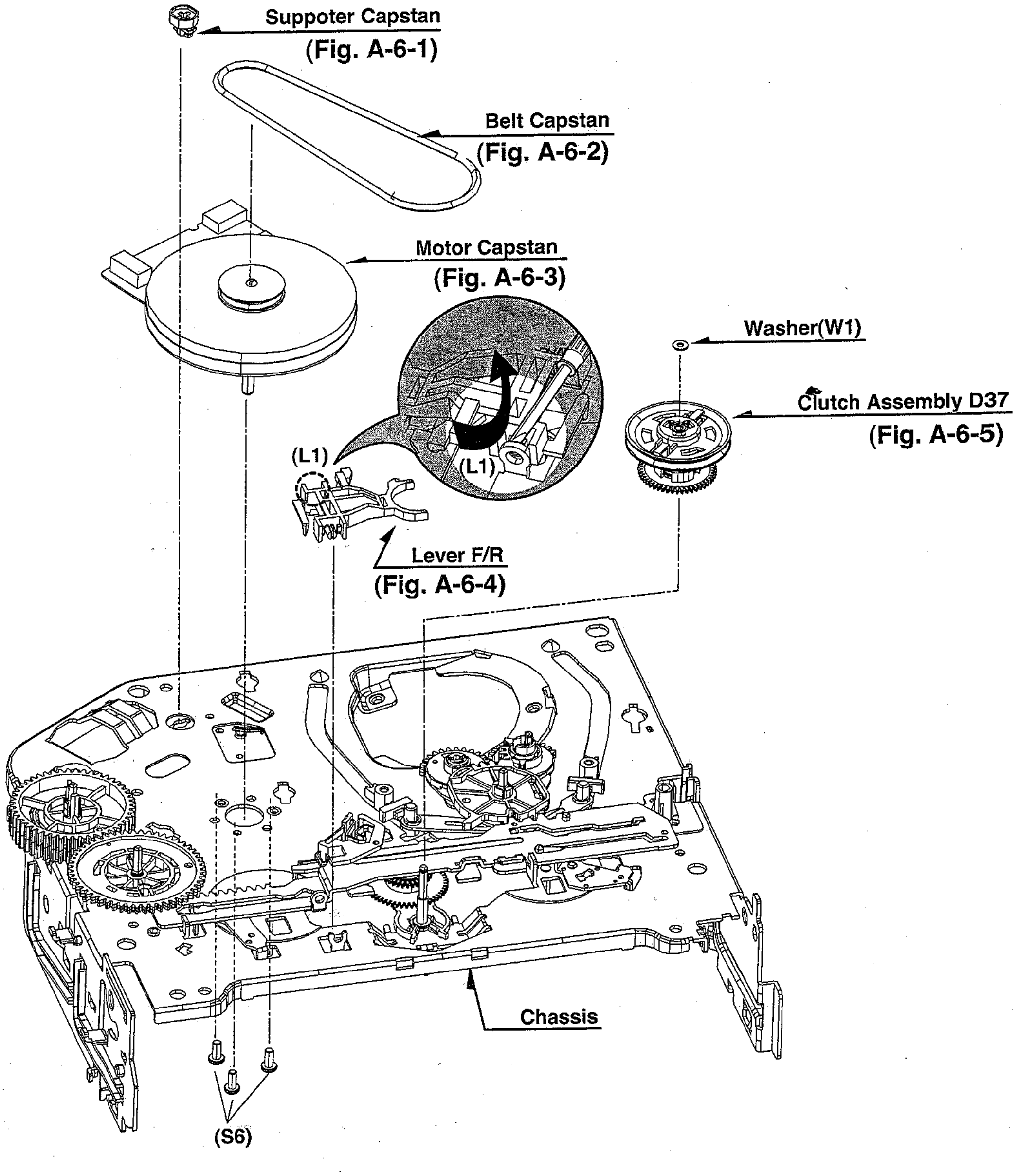

Suppoter Capstan
(Fig. A-6-1)
Belt Capstan
(Fig. A-6-2)
Motor Capstan
(Fig. A-6-3)
Washer(W1)
Clutch Assembly D37
(Fig. A-6-5)
(L1)
(L1)
Lever F/R
(Fig. A-6-4)
Chassis
(S6)

Fig. A-6

20. Supporter, Capstan (Fig. A-6-1)

1) Turn the supporter and Capstan by 90 deg. clockwise with a driver for disassembly.

21. Belt Capstan (Fig. A-6-2) / Motor Capstan (Fig. A-6-3)

1) Separate the belt Capstan.
2) Undo 3 screws (S6) on the bottom side of chassis and disassemble it upward.

22. Lever F/R (Fig. A-6-4)

1) Release the locking tab (L1) and then disassemble it upward.

23. Clutch Assembly D37 (Fig. A-6-5)

1) Remove the washer (W1) and then disassemble it upward.

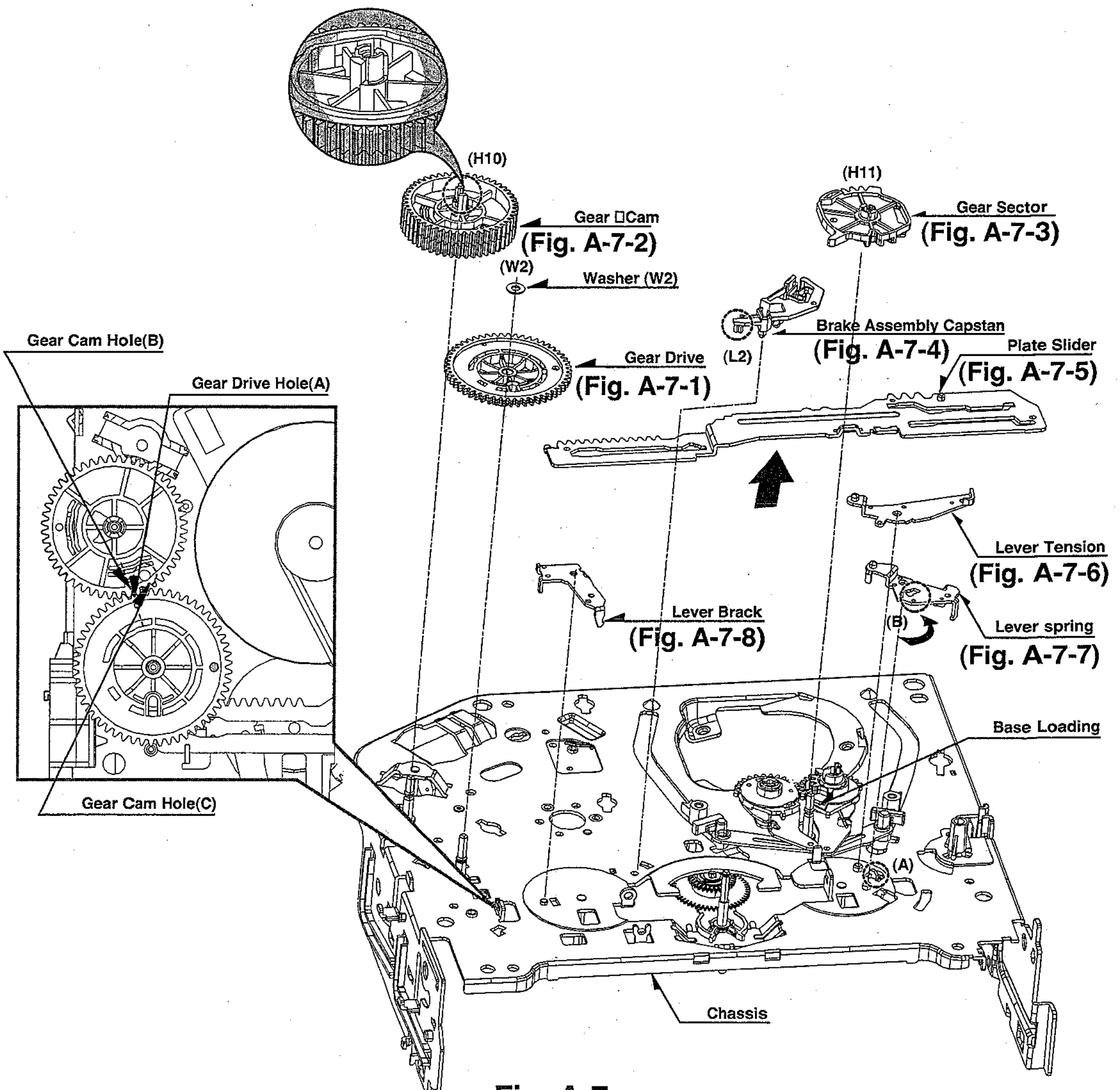

(H10)
Gear □Cam
(Fig. A-7-2)
(W2)
Washer (W2)
(H11)
Gear Sector
(Fig. A-7-3)
Brake Assembly Capstan
(Fig. A-7-4)
Plate Slider
(Fig. A-7-5)
Gear Cam Hole(B)
Gear Drive Hole(A)
Gear Drive
(L2)
(Fig. A-7-1)
Lever Tension
(Fig. A-7-6)
Lever Brack
(Fig. A-7-8)
(B)
Lever spring
(Fig. A-7-7)
Base Loading
Gear Cam Hole(C)
(A)
Chassis

Fig. A-7

24. Gear Drive (Fig. A-7-1)/ Gear Cam (Fig. A-7-2)

1) Remove the washer (W2) and then disassemble the gear drive.
2) Release the hook (H10) of the gear cam and then disassemble it upward.

CAUTIONS

For the assembly, adjust both the gear driver hole (A) and the gear cam hole (B) straightly and then correspond the gear cam hole (C) to the chassis hole.

25. Gear Sector (Fig. A-7-3)

1) Release the hook (H11) of the gear sector and then hold the gear sector upward.

26. Brake Assembly Capstan (Fig. A-7-4)

1) Release the locking tab (L2) on the bottom side of the plate slider and then disassemble it upward.

27. Plate Slider (Fig. A-7-5)

1) Disassemble the plate slider while holding it up.

28. Lever Tension (Fig. A-7-6)

1) Release the lever tension from the guide (A) of chassis while turning it anti-clockwise.
2) Disassemble the lever tension while holding it up.

29. Lever Spring (Fig. A-7-7)

1) Release the (B) part of the lever spring from the guide (A) of chassis while turning it anti-clockwise.
2) Disassemble the lever tension while holding it up.

30. Lever Brake (Fig. A-7-8)

1) Disassemble the lever brake while holding it up.

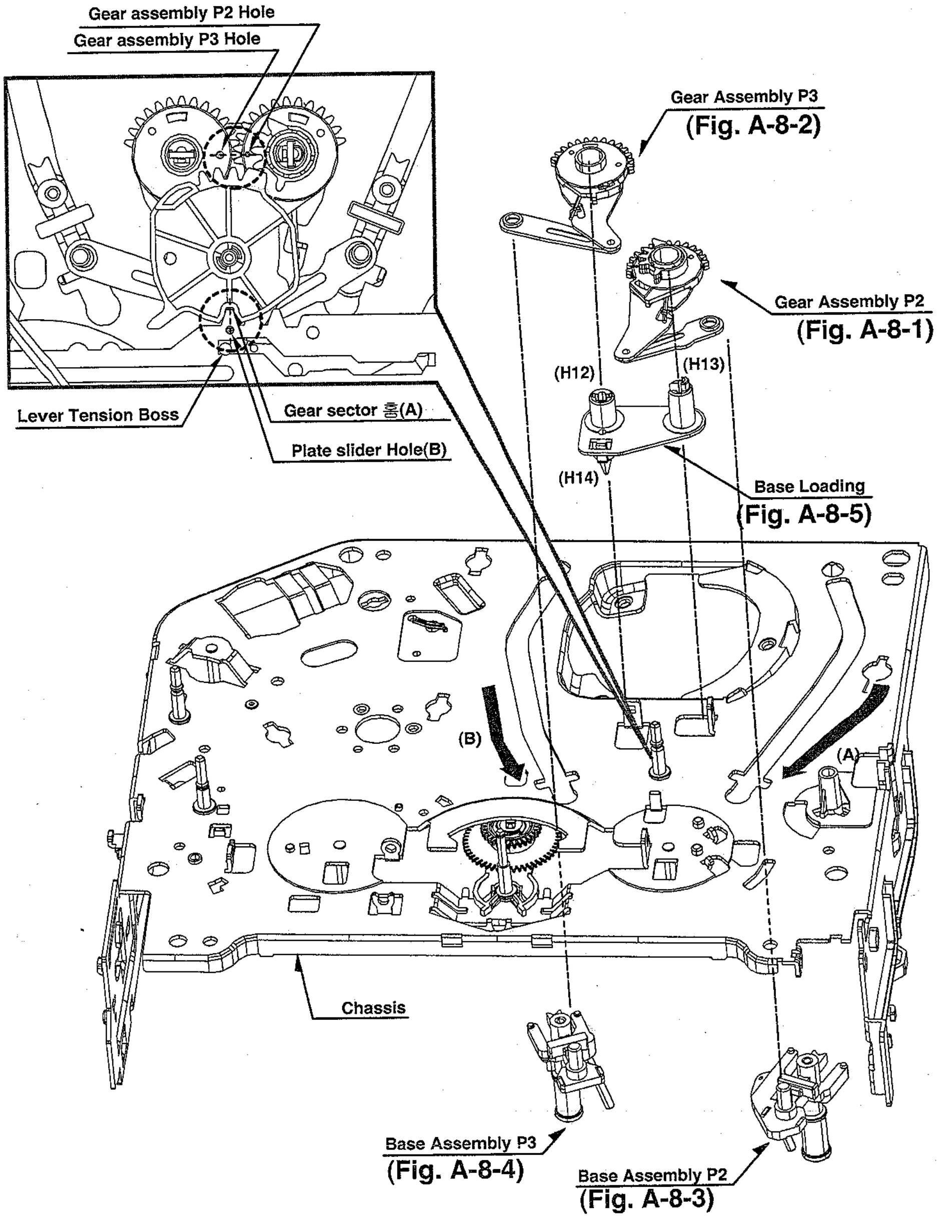

Gear assembly P2 Hole
Gear assembly P3 Hole
Gear Assembly P3
(Fig. A-8-2)
Gear Assembly P2
(Fig. A-8-1)
(H12)
(H13)
(H14)
Lever Tension Boss
Gear sector 홈(A)
Plate slider Hole(B)
Base Loading
(Fig. A-8-5)
(B)
(A)
Chassis
Base Assembly P3
(Fig. A-8-4)
Base Assembly P2
(Fig. A-8-3)

Fig. A-8

31. Gear Assembly P2 (Fig. A-8-1)/ Gear Assembly P3 (Fig. A-8-2)

1) Hold the gear assembly P2 upward.
2) Hold the gear assembly P3 upward.

CAUTIONS

For the assembly, check the holes of both the gear assembly P2 and the P3 are adjusted straightly, and then correspond the gear section groove (A) to the plate slider hole (B).

32. Base Assembly P2 (Fig. A-8-3)/ Base Assembly P3 (Fig. A-8-4)

1) Disassemble the base assembly P2 downward while moving it toward the arrow (A) direction along with the guide hole of chassis.
2) Disassemble the base assembly P2 downward while moving it toward the arrow (B) direction along with the guide hole of chassis.

33. Base Loading (Fig. A-8-5)

1) Release 3 hooks (H12, 13, 14) of the base loading, and then disassemble them upward.
   - Reverse the mechanism.

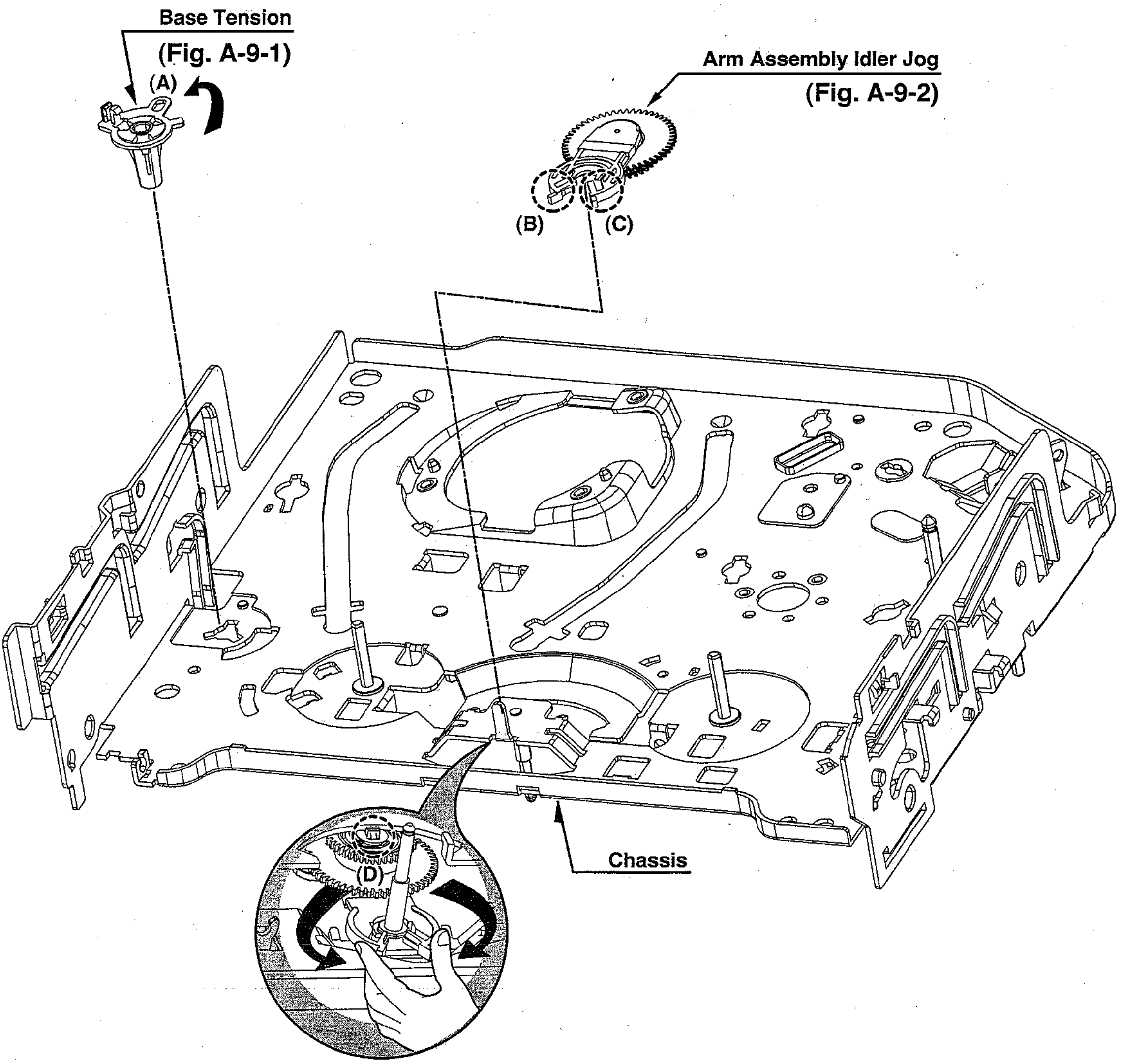

Base Tension
(Fig. A-9-1)
(A)
Arm Assembly Idler Jog
(Fig. A-9-2)
(B)
(C)
(D)
Chassis

Fig. A-9

34. Base Tension (Fig. A-9-1)

1) Release the (A) part of the base tension from the embossing of chassis.
2) Hold the base tension upward while turning it anti-clockwise.

35. Arm assembly Idler Jog (Fig. A-9-2)

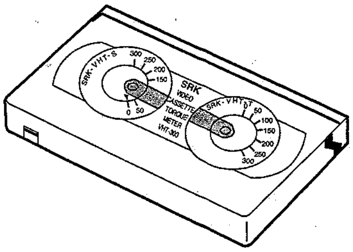
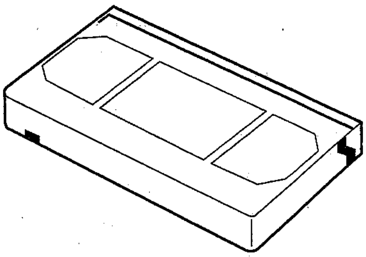
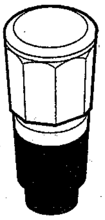
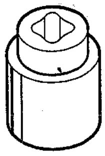
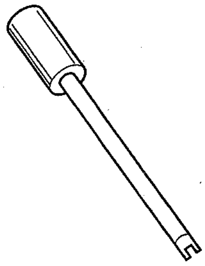
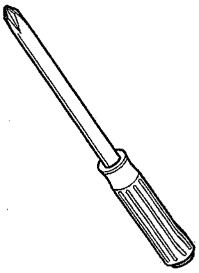
1) Push both (B), (C) parts in Fig. A-9-2 toward the arrow direction.
2) Disassemble the arm assembly idler upward.

CAUTIONS

Take care to ensure that the (D) part in the drawing is not hung to chassis in disassembly.

DECK MECHANISM ADJUSTMENT

• Fixtures and Tools for Service

1. Cassette Torque Meter SRK-VHT-303(Not SVC part) Part No:D00-D006  SRK-VHT-S 300 250 200 150 0 50 SRK VIDEO CASSETTE TORQUE METER VHT-303 SRK-VHT-T 50 100 150 200 250 300	2. Alignment tape Part No NTSC:DTN-0001 PAL:DTN-0002 	3. Torque gauge 600g.Cm ATG Part No:D00-D002 
4. Torque gauge adaptor Part No:D09-R001 	5. Post height adjusting driver Part No:DTL-0005 	6. + Type driver (ø5) 

DECK MECHANISM ADJUSTMENT

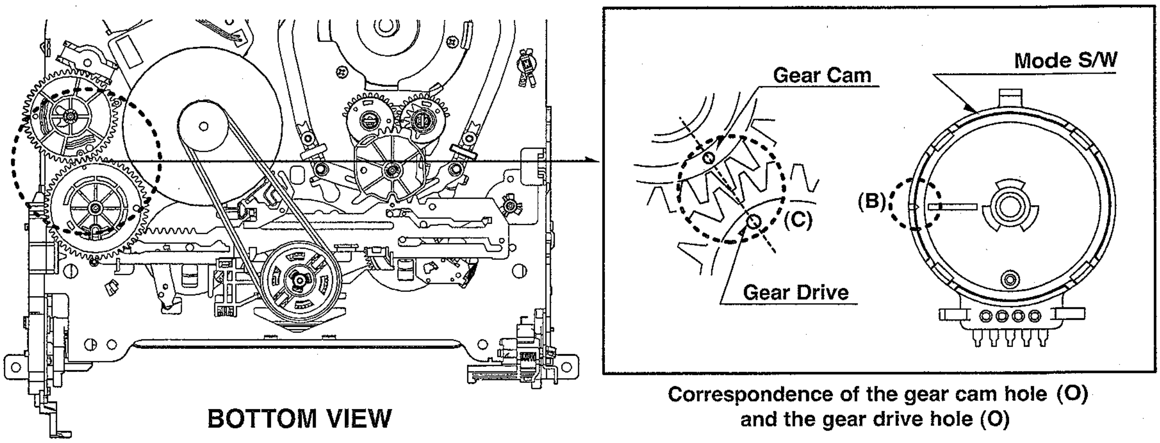
1. Mechanism Assembly Mode Check

Purpose of adjustment : To make tools normally operate by positioning tools accurately.

Fixtures and tools used	VCR (VCP) status	Checking Position
• Blank Tape (empty tape)	• Eject Mode (with cassette withdrawn)	• Mechanism and Mode Switch

1) Turn the VCR on and take the tape out by pressing the eject button.
2) Separate both top cover and plate top, and check both the hole (A) of gear cam and the hole (A') of chassis correspond (Fig. C-2).
3) If it is done as in the paragraph 2): Turn the gear cam as in No.2) after mantling the motor assembly L/D.
4) Undo the screw fixing the deck and the main frame, and separate the deck assembly. Check both the hole (A) of gear cam and the hole (A') of chassis correspond (Fig. C-1).
5) Check the mode S/W on the main P.C. board locates at a proper position as in (B) of the Fig. (C-1).
6) Connect the deck to the main P.C. board and perform all types of test.

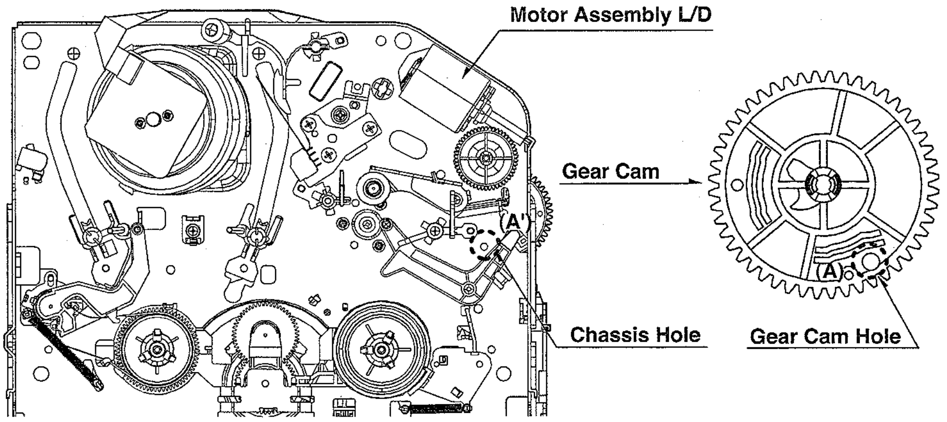
CHECK DIAGRAM



BOTTOM VIEW

Correspondence of the gear cam hole (O) and the gear drive hole (O)

Fig. C-1



TOP VIEW

Fig. C-2

DECK MECHANISM ADJUSTMENT

2. Previous Preparation for Deck Adjustment

(Preparation to load the VCR (VCP) with cassette tape not inserted)

1) Take the power cord from the consent.
2) Separate the top cover and the plate assembly top.
3) Insert the power cord into again.
4) Turn the VCR (VCP) on and load the cassette while pushing the lever stopper of the holder assembly CST backward. In this case, clog both holes on the housing rail part of chassis to prevent detection of the end sensor.

If doing so, proceeding to the stop mode is done. In this status, input signals of all modes can be received. However, operation of the Rewind and the Review is impossible since the take-up reel remains at stop status and so cannot detect the reel pulse (however, possible for several seconds).

3. Torque Measuring

Purpose of Measuring : To measure and check the reel torque on the take-up part and the supply part that performs basic operation of the VCR (VCP) for smoothly forwarding the tape.
Measure and check followings when the tape is not smoothly wound or the tape velocity is abnormally proceeded:

Fixtures and tools used	VCR (VCP) status	Measuring method
• Torque Gauge (600 g.cm ATG) • Torque Gauge Adaptor • Cassette Torque Meter SRK-VHT-303	• Play (FF) or Review (REW) Mode	• Try to operate the VCR (VCP) per mode with the tape not inserted (See '2. Prior Preparation for Deck Adjustment). • Measure after adhering and fixing the torque gauge adaptor to the torque gauge (Fig. C-3-1) • Read scale of the supply or take-up part of the cassette torque meter (Fig. C-3-2).

Item	Mode	Instruments	Reel Measured	Measuring Value
Fast forward Torque	Fast Forward	Torque Gauge	Take-Up Reel	More than 400g°cm
Rewind Torque	Rewind	Torque Gauge	Supply Reel	More than 400g°cm
Play Take-Up Torque	Play	VHT-303	Take-Up Reel	40~100g°cm
Review Torque	Review	VHT-303	Supply Reel	120~210g°cm

NOTE

Adhere the torque gauge adaptor to the torque gauge for measuring the value.

• Torque Gauge (600g.cm ATG)

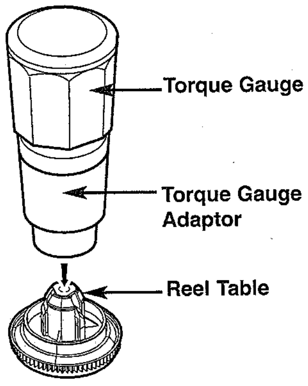


Fig. C-3-1

• Cassette Torque Meter (SRK-VHT-303)

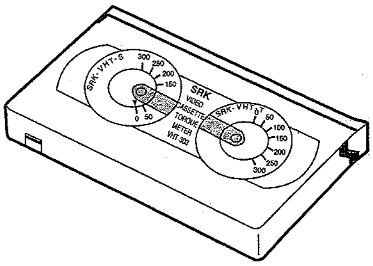


Fig. C-3-2

4. Guide Roller Height Adjustment

Purpose of adjustment : To ensure that the bottom surface of the tape can travel along with the tape lead line of the lower drum by constantly and adjusting and maintaining the height of the tape.

4-1. Prior Adjustment

Fixtures and tools used	VCR (VCP) status	Adjustment position
• Post Height Adjusting Driver	• Play or Review Mode	• The guide roller height adjusting screw on the supply guide roller and the take-up guide roller

Adjustment Procedure

1) Travel the tape and check the bottom surface of the tape travels along with the guide line of the lower drum.
2) If the tape travels toward the lower part of guide line on the lower drum, turn the guide roller height adjusting screw to the left
3) If it travels to the upper part, turn it to the right.
4) Adjust the height of the guide roller to ensure that the tape is guided on the guide line of the lower drum at the inlet/outlet of the drum. (Fig. C-4-1)

ADJUSTMENT DIAGRAM

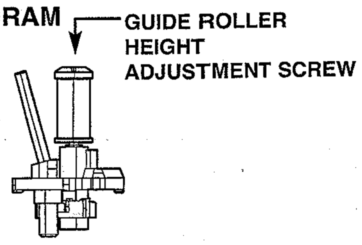

GUIDE ROLLER HEIGHT ADJUSTMENT SCREW

Fig. C-4-1

4-2. Fine Adjustment

Fixtures and tools used	Measuring tools and connection position	VCR (VCP) status	Adjustment position
• Oscilloscope • Standard test tape • Post height adjusting driver	• CH-1: PB RF Envelope • CH-2: NTSC : SW 30Hz PAL : SW 25Hz • Head switching output point • RF Envelope output point	• Play the standard test tape.	• Guide roller height adjusting screw

1) Play the standard test tape after connecting the probe of oscilloscope to the RF envelope output point and the head switching output point.
2) Tracking control (playback) : Locate it at the center (Set the RF output to the maximum value via the tracking control when such adjustment is completed after the drum assembly is replaced.)
3) Height adjusting screw: Flatten the RF waveform. (Fig. C-4-2)
4) Move the tracking control (playback) to the right/left. (Fig. C-4-3)
5) Check the start and the end of the RF output reduction width are constant.

CAUTIONS

There must exist no crumpling and folding of the tape due to excess adjustment or insufficient adjustment.

Waveform

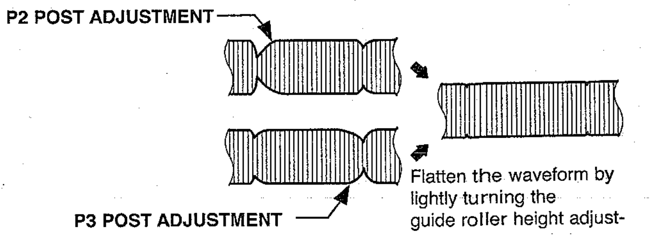

P2 POST ADJUSTMENT
P3 POST ADJUSTMENT
Flatten the waveform by lightly turning the guide roller height adjustment screw.

Fig. C-4-2

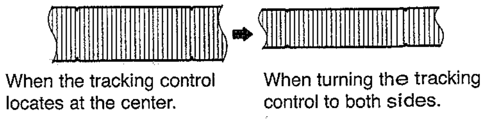
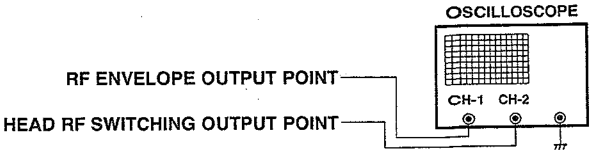

When the tracking control locates at the center.
When turning the tracking control to both sides.

Fig. C-4-2

Connection Diagram


OSCILLOSCOPE
CH-1
CH-2
RF ENVELOPE OUTPUT POINT
HEAD RF SWITCHING OUTPUT POINT

DECK MECHANISM ADJUSTMENT

5. Audio/Control (A/C) Head Adjustment

Purpose of adjustment : To ensure that audio and control signals can be recorded and played according to the contract tract by constantly maintaining distance between tape and head, and tape tension between the P3 post and the P4 post.

5-1. Prior Adjustment (performed only when no audio output appears in play of the standard test tape)

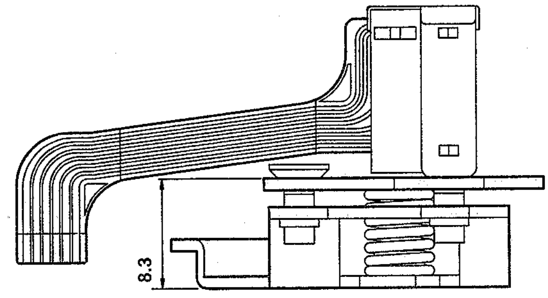
Fixtures and tools used	VCR (VCP) status	Adjustment position
• Blank Tape (Empty Tape) • Driver (+) Type ø 5	• Play the blank tape (empty tape).	• Tilt adjusting screw (C) • Height adjusting screw (B) • Azimuth adjusting screw (A)

Adjustment Procedure/Adjustment Diagrams

1) Basically use the A/C head assembly adjusted as in SPEC.
2) Check there is crumpling and folding of the tape around the A/C head. If it is, Turn and adjust the tilt adjusting screw to ensure that the tape corresponds to the bottom guide of the P4, and recheck the tape path after proceeding play for 4-5 seconds.
3) Where the tape bottom is not equal to Fig. C-5-3, Adjust the height by using the height adjusting screw (B) and then readjust it by using the tilt adjusting screw (C).

CAUTIONS

Always check the height of the A/C head since most ideal height of A/C head can be obtained when the bottom part of the tape is away 0.2 ~ 0.25mm from the bottom part of the A/C head.



A/C Head Base

Fig. C-5-1

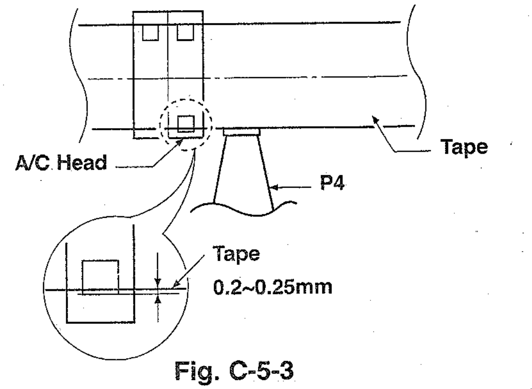
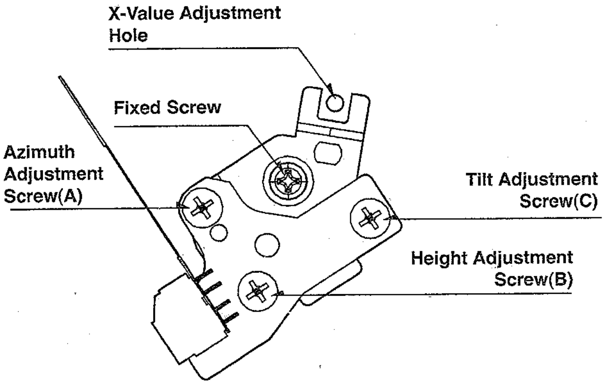


Fig. C-5-3



A/C Head Assembly

Fig. C-5-2

DECK MECHANISM ADJUSTMENT

5-2. Tape Path Check between Pinch Roller and Take up Guide (Check in the Rev Mode)

1) Check the tape pass status between the pinch roller and the take-up guide.(Check there is crumpling of the tape pass and folding of the take-up guide.)
   (1) When holding of the take-up guide bottom occurs Turn the tilt adjusting screw (C) clockwise and travel it stably to ensure there is no crumbling or folding of the tape.
   (2) When holding of the take-up guide top occurs Turn the tilt adjusting screw (C) anti-clockwise and travel it stably to ensure there is no crumbling or folding of the tape.

2) Check there is folding of the tape at the bottom or top of the take-up guide in cutting-off the REV mode

CAUTIONS

If the RF waveform is changed after adjusting the A/C head, perform fine adjustment to ensure the RF waveform is flattened.

5-3. Fine Adjustment (Azimuth Adjustment)

Fixtures and tools used	Connection position	VCR (VCP) status	Adjustment position
• Oscilloscope • Standard test tape (only for SP) • Driver (+) Type Ø 4	• Audio Output Jack	• Play the standard test • Tape, 1KHz, 7KHz.	• Azimuth Adjusting Screw (A) • Height Adjusting Screw (B)

Adjustment Procedure

1) Connect the probe of Oscilloscope to the audio output jack.
2) Ensure that Audio 1KHz, 7KHz output is flattened at the maximization point by adjusting the Azimuth adjusting screw (A).

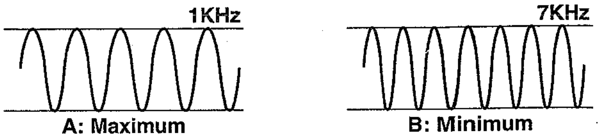
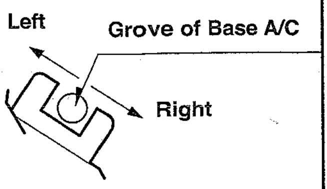

1KHz
7KHz
A: Maximum
B: Minimum

Fig. C-5-4

6. X-distance Adjustment

Purpose of adjustment : To maintain compatibility with other VCR (VCP).

Fixtures and tools used	Connection position	VCR (VCP) status	Adjustment position
• Oscilloscope • Standard test tape (only for SP) • Driver (+) Type Ø 4	• CH-1: PB RF Envelope • CH-2: NTSC ; SW 30Hz PAL:SW 25Hz • Head switching output point • RF Envelope output point	• Play the standard test tape.	 Left Grove of Base A/C Right

Adjustment Procedure

1) After releasing the auto tracking, lightly turn the fixing screw. Turn the (+) type driver (Ø 3 ~ Ø 4) on the X-distance adjusting hole to the right or left. Adjust the RF envelope level to the maximum point and then fix the fixing screws.
2) For the 31mm head, adjust it with the SP tape recorded in the width of 31mm since the head travels on the tape track only for SP with the width of 58mm.

Connection Diagram

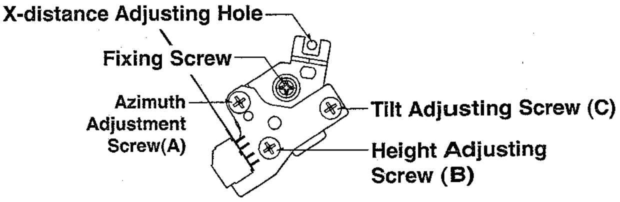
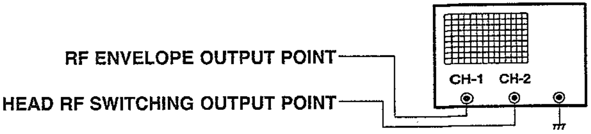

X-distance Adjusting Hole
Fixing Screw
Azimuth Adjustment Screw(A)
Tilt Adjusting Screw (C)
Height Adjusting Screw (B)

Fig. C-6


OSCILLOSCOPE
CH-1 CH-2
RF ENVELOPE OUTPUT POINT
HEAD RF SWITCHING OUTPUT POINT

7. Adjustment after Drum Assembly (Video Heads)

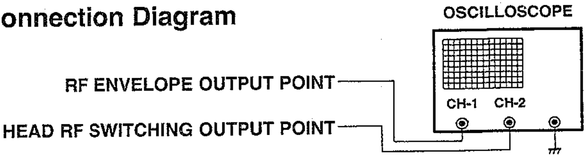
Purpose of adjustment : To adjust and stabilize the height change, X-distance change, etc depending on the guide roller after assembling the drum.

Fixtures and tools used	Connection position	VCR (VCP) status	Adjustment position
• Oscilloscope • Standard test tape (only for SP) • Post Height Adjusting Driver • Driver (+) Type Ø 5	• CH-1: PB RF Envelope • CH-2: NTSC : SW 30Hz PAL:SW 25Hz • Head switching output point • RF Envelope output point	• Play the blank tape. • Play the standard test tape.	• Fine adjustment of guide roller • Switching Point • Tracking Preset • X-distance

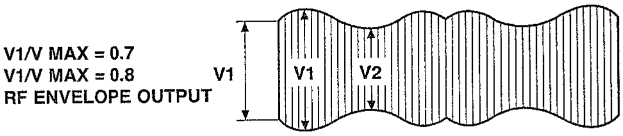
Checking/Adjustment Procedure

1) Play the blank tape (empty tape) and check whether the guide roller crumbles or wrinkles the tape and adjust it if necessary.
2) Check that the RF envelope output waveform is flat, and adjust the height of the guide roller while playing the standard test tape.
3) Adjust the switching point.
4) Check the RF envelope output is the maximum when the tracking control locates at the center. If not maximum, set up to ensure that RF envelope output becomes the maximum by turning the (+) type driver (Ø 3 ~ Ø 4) on the base A/C groove.

Connection Diagram



Waveform



8. Check of Traveling Device after Deck Assembly

8-1. Audio, RF Normalization Time (Locking Time) Check in Play after CUE or REV

Fixtures and tools used	Measuring standard	Connection position	VCR (VCP) status
• Oscilloscope • 6H 3KHz Color Bar Standard Test tape • Stop Watch	• RF Locking Time: Within 5 seconds • Audio Locking Time : Within 10 seconds	• CH-1: PB RF Envelope • CH-2: Audio output • RF Envelope output point • Audio output jack	• Play the 6H 3KHz Color Bar Standard Test tape.

Checking Procedure

1) Check that locking time of the RF and Audio waveform is fallen within the measuring standard in conversion of the play mode from the CUE or the REV mode.
2) Readjust the paragraph 5 and 6 if it deviates from the standard.

8-2. Check of Tape Curl and Jam Status

Fixtures and tools used	Fixtures and tools used	Fixtures and tools used
• T-160 Tape • T-120 Tape	• There must be no jam or curl at the first, middle and end position of tape.	• Travel the tape at the position of its first and end.

Checking Procedure

1) Check there is no abnormality of every traveling post status.
2) There must be no abnormal operation of the counter in occurrence of folding of the bottom tape. There must be not abnormality of audio signal in damage of the top tape.
3) If there is abnormality, readjust the adjustment paragraph 4 and 5.

PROTECTION, MAINTENANCE AND CHECK OF VIDEO FUNCTION

1. Checking Points prior to Repair

Following abnormal phenomena may be repaired by removal of foreign materials and oil supply. Check oiling is required at the checking set or cleaning status is complete. Determine that necessity of checking and repair the set exists after checking the using period of the set together with the user. In this case, followings must be checked:

Phenomena	Checking Points and Cause	Replace-ment
Color beat	Pollution of Full-Erase Head	o
S/N, Color Faded	Pollution of Video Head	o
Horizontal, Vertical Jitte	Pollution of Video Head or Tape Transport System	o
Poor Sound, Low Sound	Pollution of Audio/Control Head	o
No tape wound or tape wound loosely. FF or REW impossible, or slow turning	Pollution of Pinch Roller or Belt Capstan Belt	o
Tape loosely wound in REV or Unloading	Deterioration of Clutch Assembly D37 Torque	o
	Pollution of Drum and Traveling Device	Fig. C-9-3

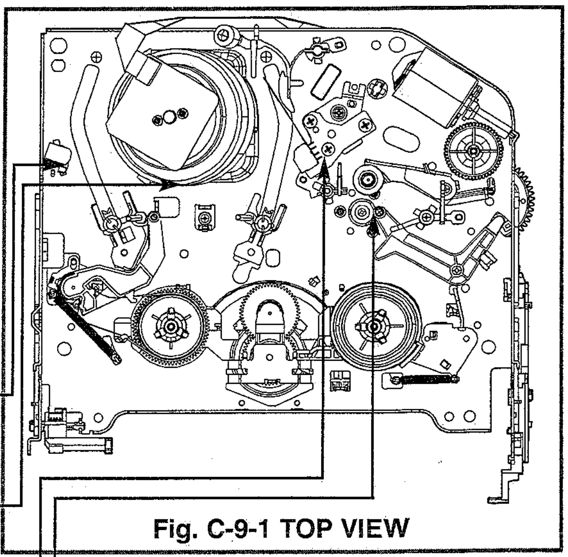

F/E Head
Video Head
A/C Head

Fig. C-9-1 TOP VIEW

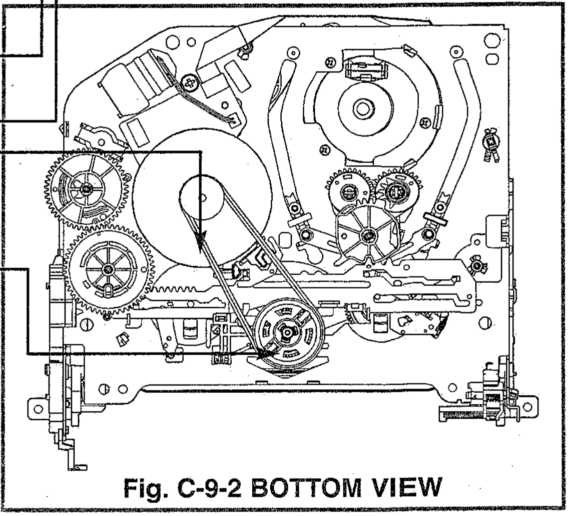

Pinch Roller
Belt Capston
Clutch Assembly A37

Fig. C-9-2 BOTTOM VIEW

CAUTIONS

If operation of the position with (O) mark is abnormal even after removing cause, replace it with substitute product since it shows damage or wearing.

*** No. (1) ~ (12) shows sequence that the tape moves from the supply reel to the take-up reel.)**

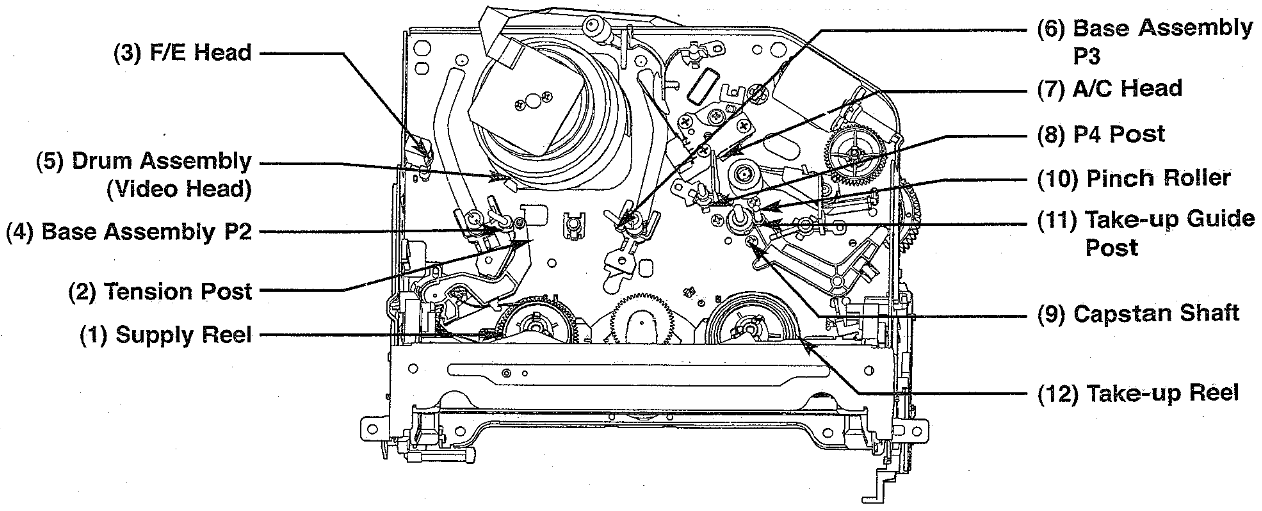

(3) F/E Head
(5) Drum Assembly (Video Head)
(4) Base Assembly P2
(2) Tension Post
(1) Supply Reel
(6) Base Assembly P3
(7) A/C Head
(8) P4 Post
(10) Pinch Roller
(11) Take-up Guide Post
(9) Capstan Shaft
(12) Take-up Reel

Fig. C-9-3 Tape Transport System

PROTECTION, MAINTENANCE AND CHECK OF VIDEO FUNCTION

2. Essential Check and Repair

Recording density of the video is far higher than the audio. Therefore video parts are very precise so as to allow only error of 1/1000mm or so in order to maintain compatibility with other videos.

If one of these parts is polluted or old, same phenomena will appear as they are damaged.

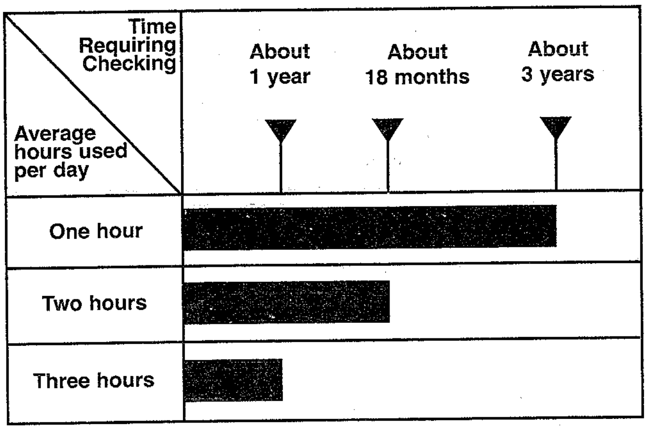
To maintain clear screen, regular check, replacement of old and damaged parts and oil supply, etc are essential.

3. Regular Check and Repair

Check and repair schedule is not constant since they vary depending on method that the consumer uses video and environment where the video is installed at.

However, for the video used by common household, good screen will be maintained if regular check and repair per 1,000 hour is performed. The following chart shows relationship between using time and checking time:

Table 1



4. Tools for Check and Repair

(1) Grease: Floil G-3114 (KANTO) or equivalent grease (Green)
(2) Grease: Kanto G-754, PL-433 (Yellow)
(3) Alcohol (Isopropyl Alcohol)
(4) Cleaning Patch (cloth)

5. Maintenance Process

5-1) Removal of Foreign Material

(1) Removal of foreign material from video head (Fig. C-9-4)

Firstly try to use a cleaning tape.

Use a cleaning patch if foreign materials are not removed with the cleaning tape due to severe dirty of the head. Soak the cleaning patch in alcohol and put it to the head tip. Smoothly turn the drum (turning cylinder) to the right or left (In this case, the cleaning patch must not be moved vertically).

After completely drying the head, test the traveling status of the tape.

If alcohol (Isopropyl Alcohol) remains at the video head, the tape may be damaged when this solution touches with the head surface.

Never use a cloth bar (commercial sale).

(2) Wipe the tape transport system and the drive system with the cleaning patch soaked in alcohol (Isopropyl Alcohol) when removing foreign materials from them.

1) The part touched with the traveling tape is called as tape transport system. The drive system consists of parts to travel the tape.

2) Care must be exercised so that unreasonable force to change the pattern will be applied to the tape transport system during removal of foreign materials.

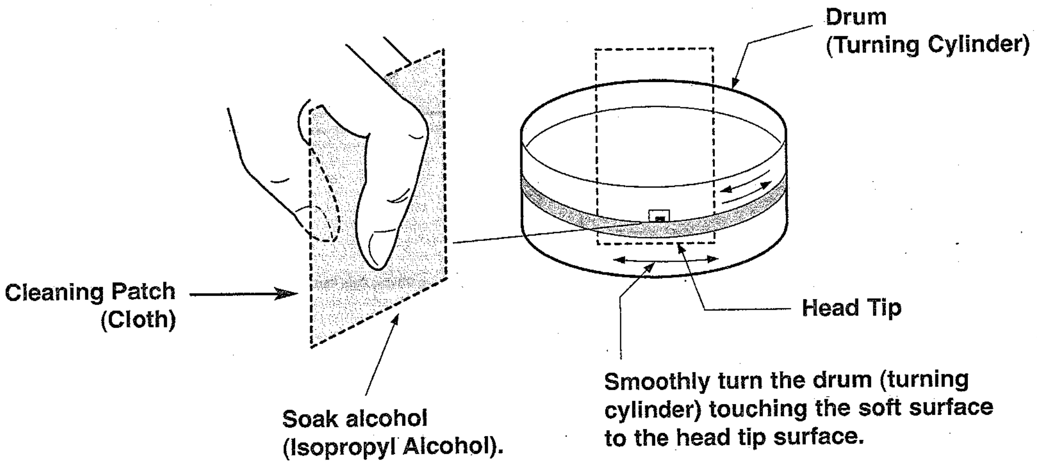

Drum
(Turning Cylinder)
Cleaning Patch
(Cloth)
Head Tip
Soak alcohol
(Isopropyl Alcohol).
Smoothly turn the drum (turning cylinder) touching the soft surface to the head tip surface.

Fig. C-9-4

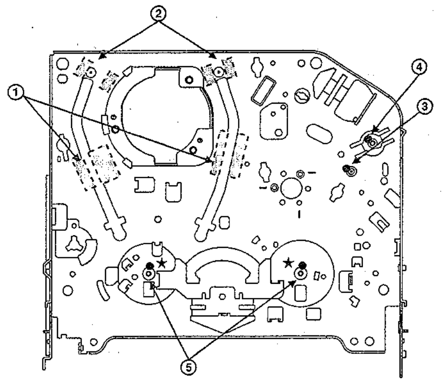
5-2) Grease Applications

(1) Grease Application Method

Apply grease by using a cloth swab or brush. Care must be exercised so that excess quantity should not be used. If the excessive quantity is applied, wipe it with the gauze soaked in alcohol (Isopropyl Alcohol).

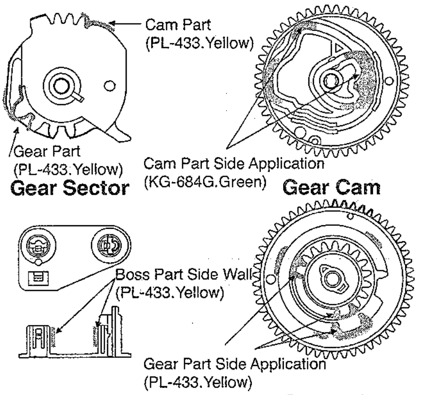
NOTE: POSITION OF GREASE APPLICATION

(1) Inner Side Surface and Top Surface of Loading Path
(2) Stable Adhesion Part of Base P2, P3
(3) Arm Pinch Shaft
(4) Gear Wheel Shaft
(5) Reel S. T. Shaft
(1) (2) (3) (4): KG-684G (Green)
(5): PL-433 (Yellow)



Chassis (TOP)

Gear Part

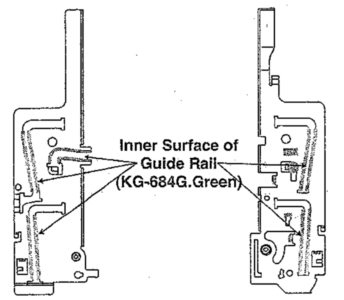

Cam Part
(PL-433.Yellow)
Gear Part
(PL-433.Yellow)
Cam Part Side Application
(KG-684G.Green)
Boss Part Side Wall
(PL-433.Yellow)
Gear Part Side Application
(PL-433.Yellow)

Gear Sector

Gear Cam

Base Loading

Gear Drive


Inner Surface of
Guide Rail
(KG-684G.Green)

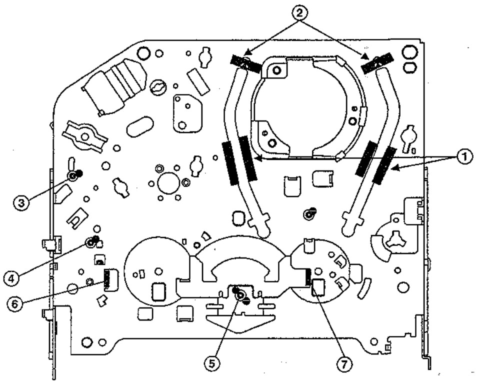
Chassis (L)

Chassis (R)

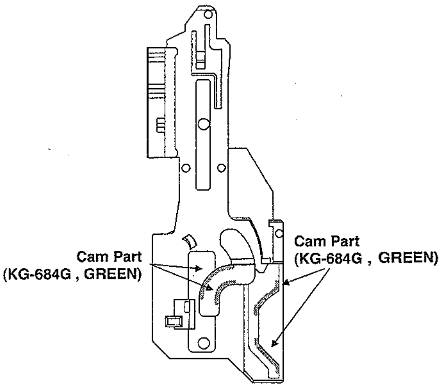
(2) Regular Grease Application

Apply grease to the designated application position every 500 hour.

(1) Inner Side Surface and Top Surface of Loading Path
(2) Stable Adhesion Part of Base P2, P3 Coil
(3) Gear Cam Shaft
(4) Gear Drive Shaft
(5) Clutch Shaft Groove
(6) Guide Part on the Plate Slider Side Wall (Left)
(7) Guide Part on the Plate Slider Side Wall (Right)
(1) (2) (3) (4) (5) (6) (7): KG-684G (Green)



Chassis (Bottom)


Cam Part
(KG-684G , GREEN)
Cam Part
(KG-684G , GREEN)

Gear Rack F/L

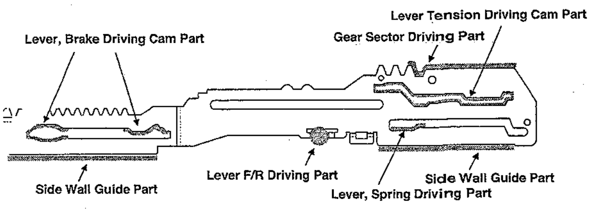
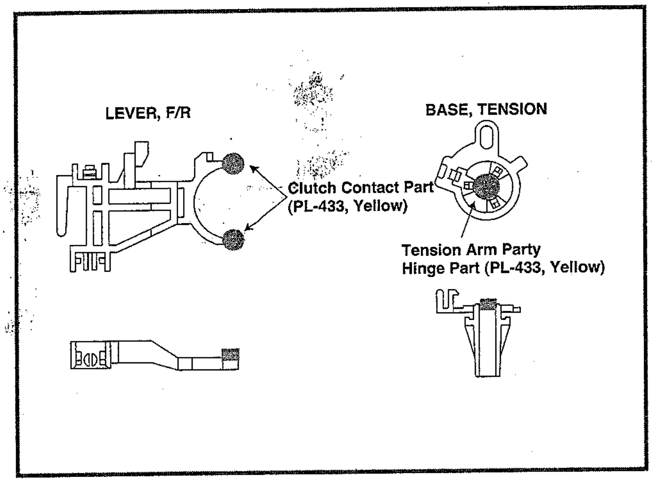

Lever Tension Driving Cam Part
Lever, Brake Driving Cam Part
Gear Sector Driving Part
Side Wall Guide Part
Lever F/R Driving Part
Side Wall Guide Part
Lever, Spring Driving Part

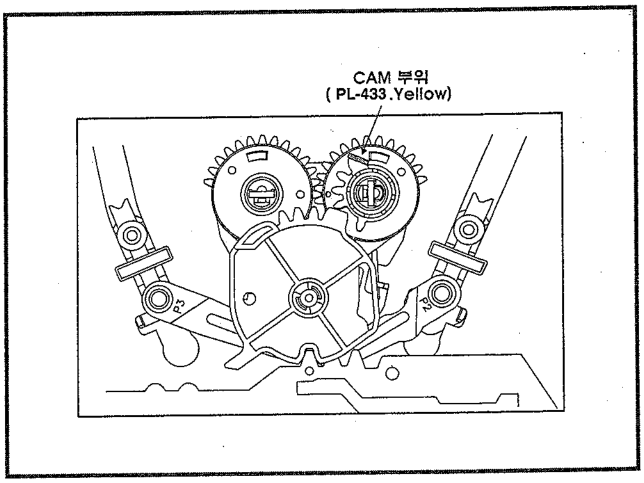
Plate Slider

PROTECTION, MAINTENANCE AND CHECK OF VIDEO FUNCTION

Lever, F/R, Base, Tension


LEVER, F/R
BASE, TENSION
Clutch Contact Part
(PL-433, Yellow)
Tension Arm Party
Hinge Part (PL-433, Yellow)

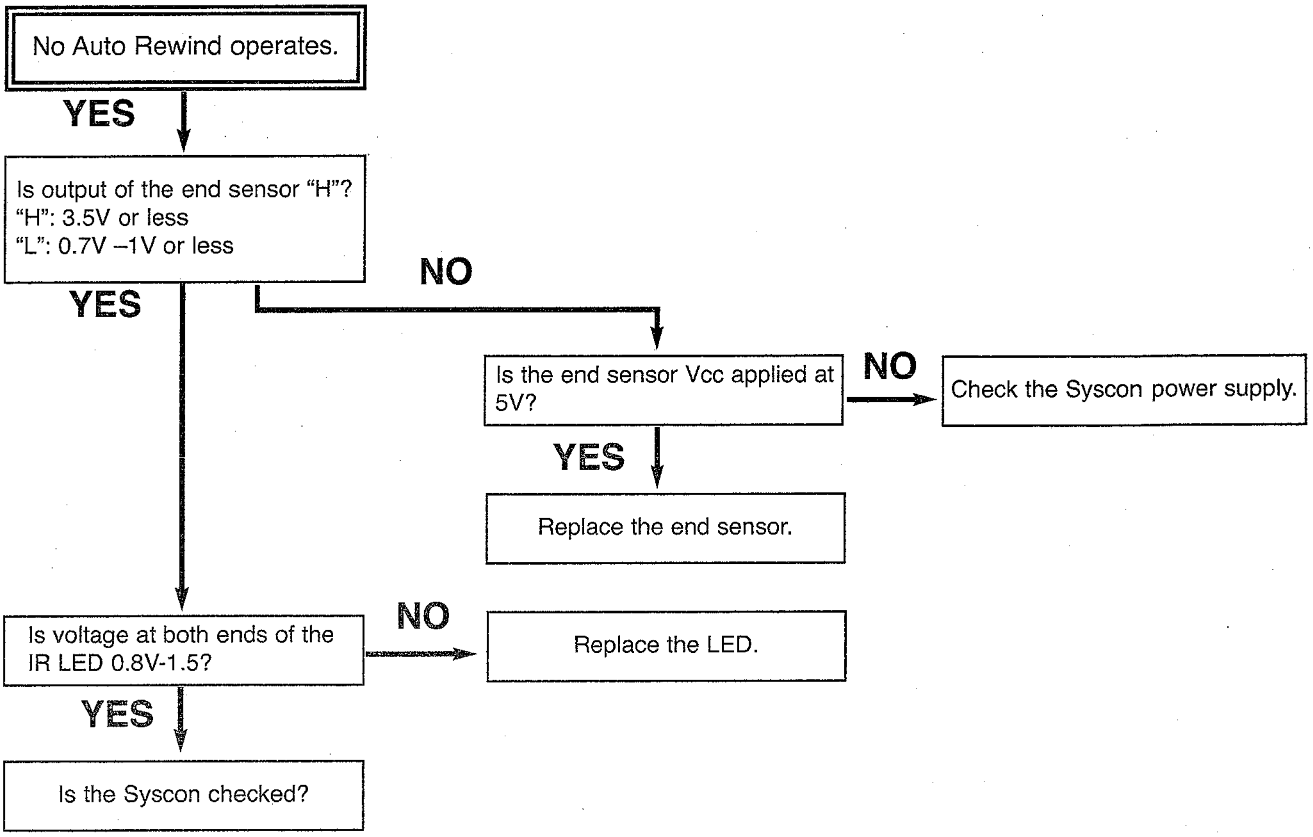
GEAR AY, P2 & P3


CAM 부위
(PL-433.Yellow)
P3
P2

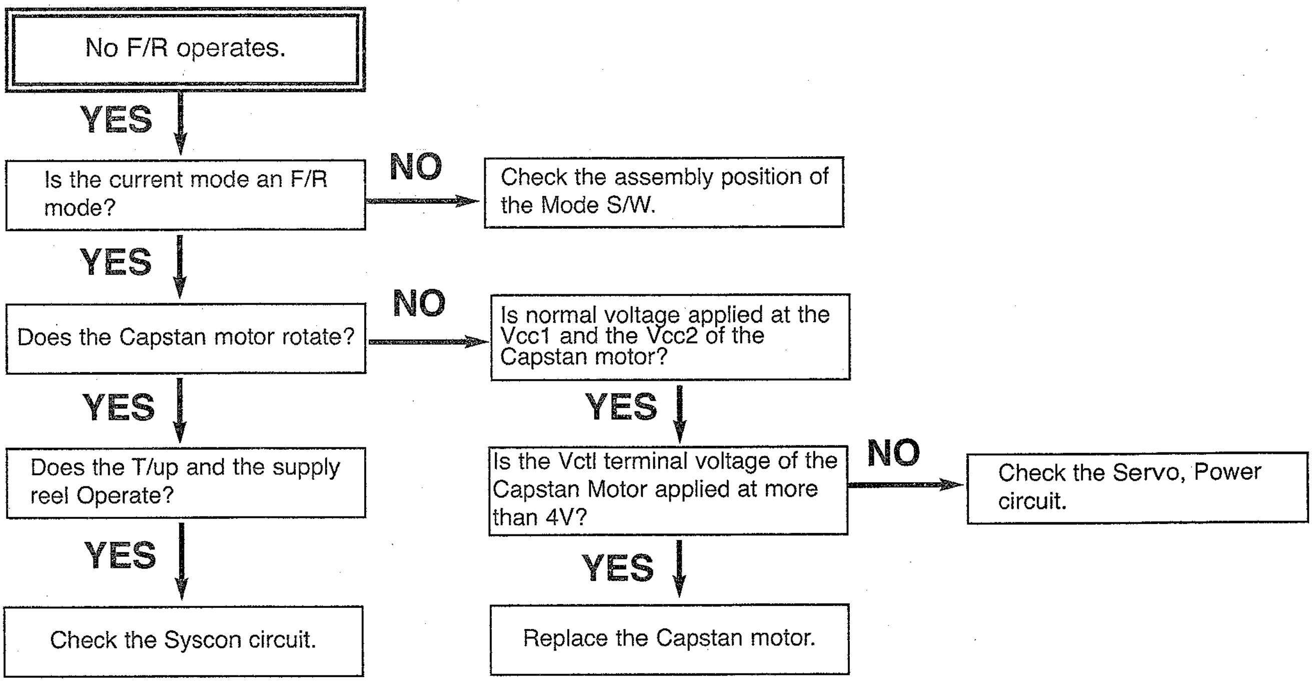
MECHANISM TROUBLESHOOTING GUIDE

1.Deck Mechanism

A.

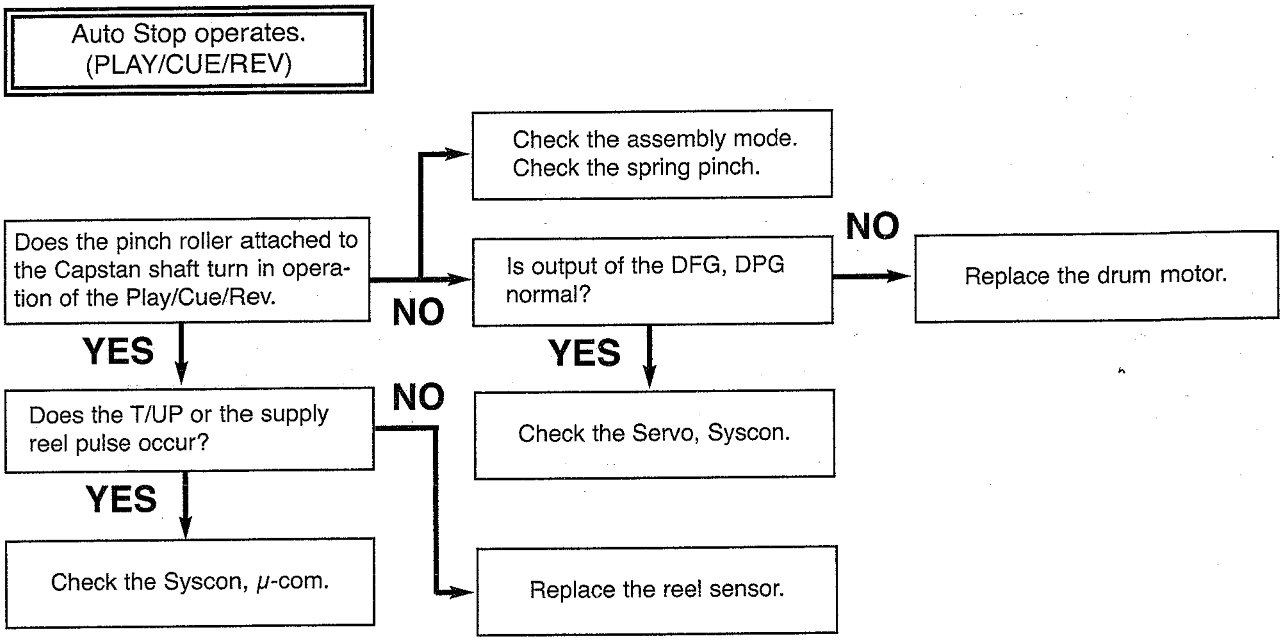

No Auto Rewind operates.
YES
Is output of the end sensor "H"?
"H": 3.5V or less
"L": 0.7V –1V or less
YES
NO
Is the end sensor Vcc applied at 5V?
NO
Check the Syscon power supply.
YES
Replace the end sensor.
Is voltage at both ends of the IR LED 0.8V-1.5?
NO
Replace the LED.
YES
Is the Syscon checked?

B.

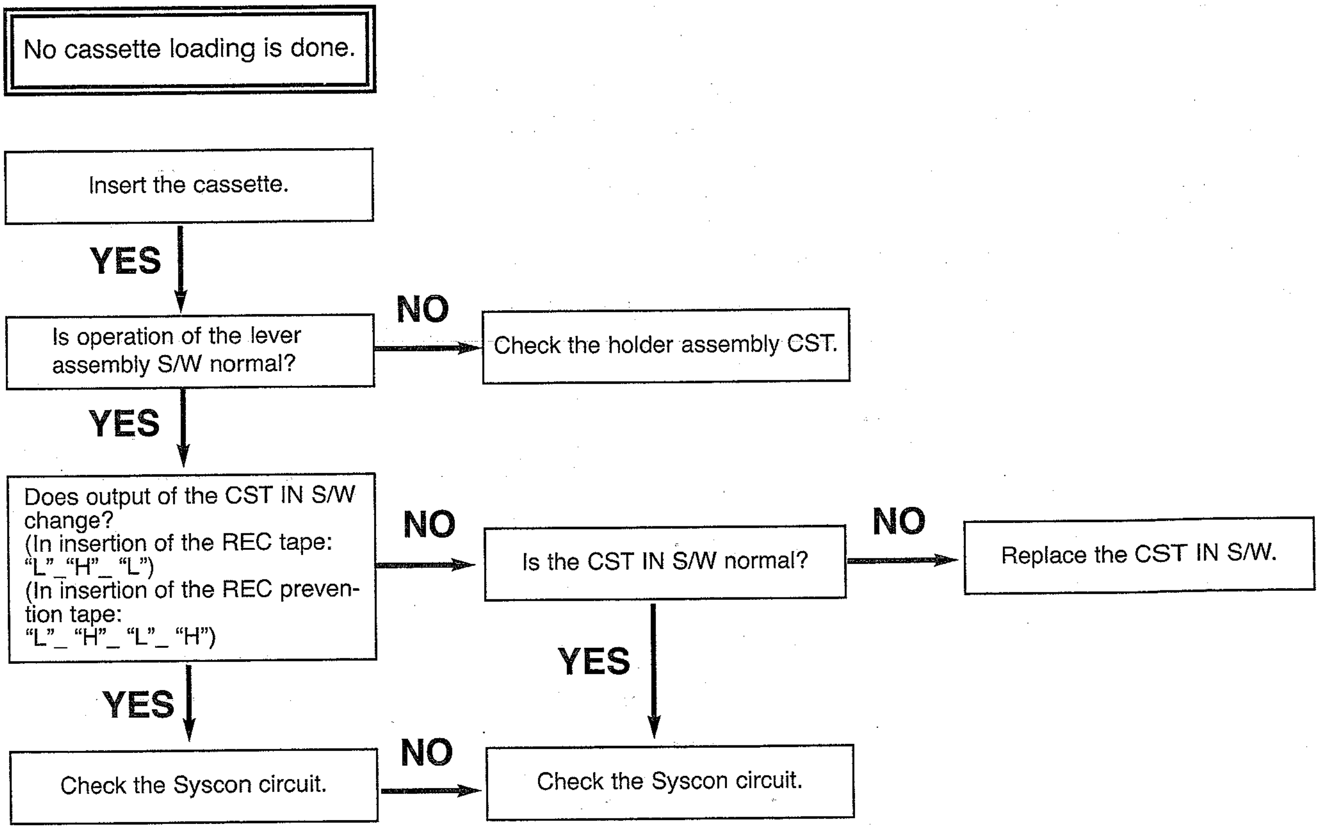

No F/R operates.
YES
Is the current mode an F/R mode?
NO
Check the assembly position of the Mode S/W.
YES
Does the Capstan motor rotate?
NO
Is normal voltage applied at the Vcc1 and the Vcc2 of the Capstan motor?
YES
YES
Does the T/up and the supply reel Operate?
Is the Vctl terminal voltage of the Capstan Motor applied at more than 4V?
NO
Check the Servo, Power circuit.
YES
YES
Check the Syscon circuit.
Replace the Capstan motor.

MECHANISM TROUBLESHOOTING GUIDE

C.

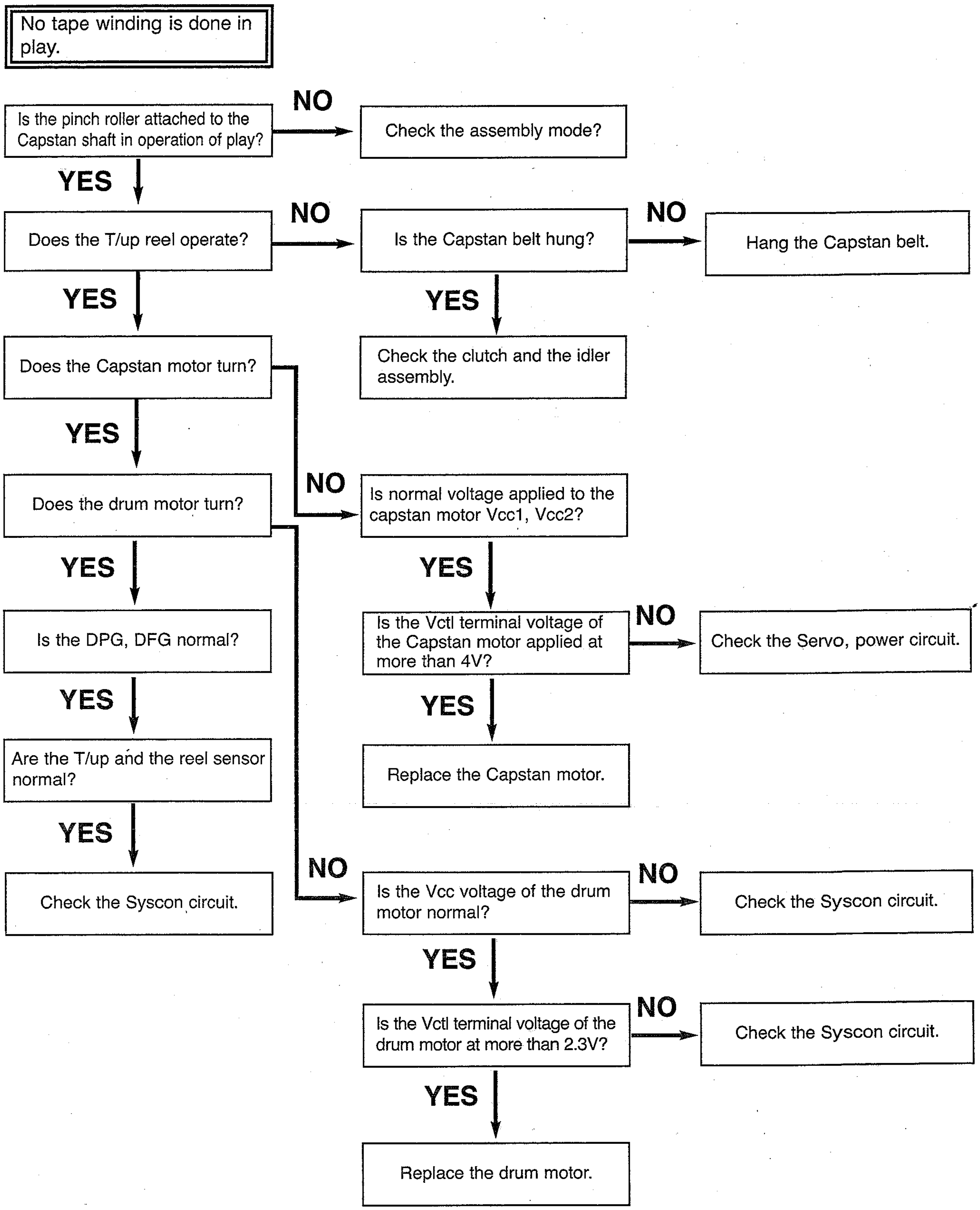

Auto Stop operates.
(PLAY/CUE/REV)
Does the pinch roller attached to the Capstan shaft turn in operation of the Play/Cue/Rev.
NO
Check the assembly mode.
Check the spring pinch.
Is output of the DFG, DPG normal?
NO
Replace the drum motor.
YES
Check the Servo, Syscon.
YES
Does the T/UP or the supply reel pulse occur?
NO
Replace the reel sensor.
YES
Check the Syscon, µ-com.

D.


No cassette loading is done.
Insert the cassette.
YES
Is operation of the lever assembly S/W normal?
NO
Check the holder assembly CST.
YES
Does output of the CST IN S/W change?
(In insertion of the REC tape:
"L"_"H"_ "L")
(In insertion of the REC prevention tape:
"L"_ "H"_ "L"_ "H")
NO
Is the CST IN S/W normal?
NO
Replace the CST IN S/W.
YES
YES
Check the Syscon circuit.
NO
Check the Syscon circuit.

MECHANISM TROUBLESHOOTING GUIDE

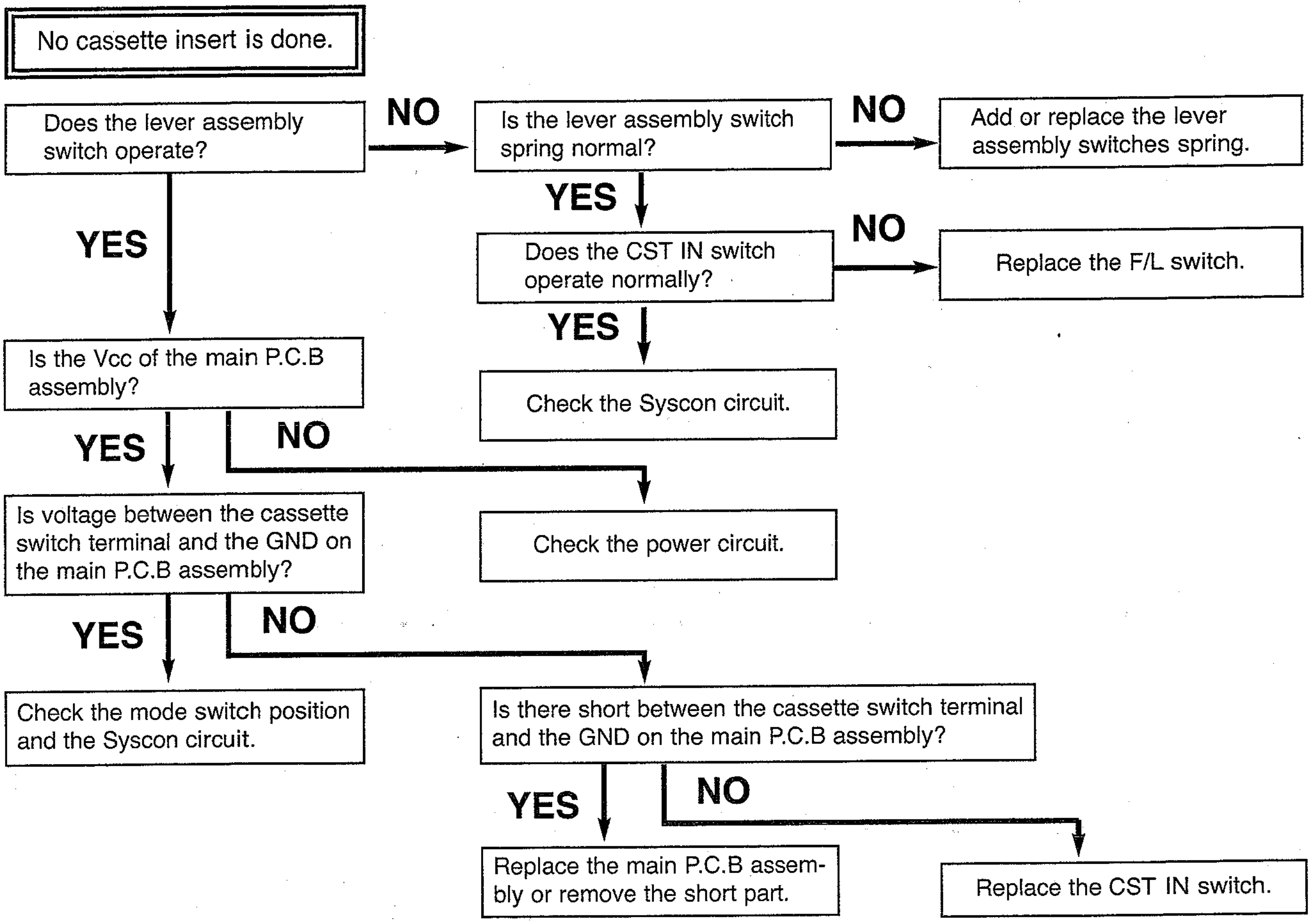
E.


No tape winding is done in play.
Is the pinch roller attached to the Capstan shaft in operation of play?
NO
Check the assembly mode?
YES
Does the T/up reel operate?
NO
Is the Capstan belt hung?
NO
Hang the Capstan belt.
YES
YES
Check the clutch and the idler assembly.
Does the Capstan motor turn?
YES
NO
Does the drum motor turn?
Is normal voltage applied to the capstan motor Vcc1, Vcc2?
YES
YES
Is the DPG, DFG normal?
Is the Vctl terminal voltage of the Capstan motor applied at more than 4V?
NO
Check the Servo, power circuit.
YES
YES
Are the T/up and the reel sensor normal?
Replace the Capstan motor.
YES
NO
Check the Syscon circuit.
Is the Vcc voltage of the drum motor normal?
NO
Check the Syscon circuit.
YES
Is the Vctl terminal voltage of the drum motor at more than 2.3V?
NO
Check the Syscon circuit.
YES
Replace the drum motor.

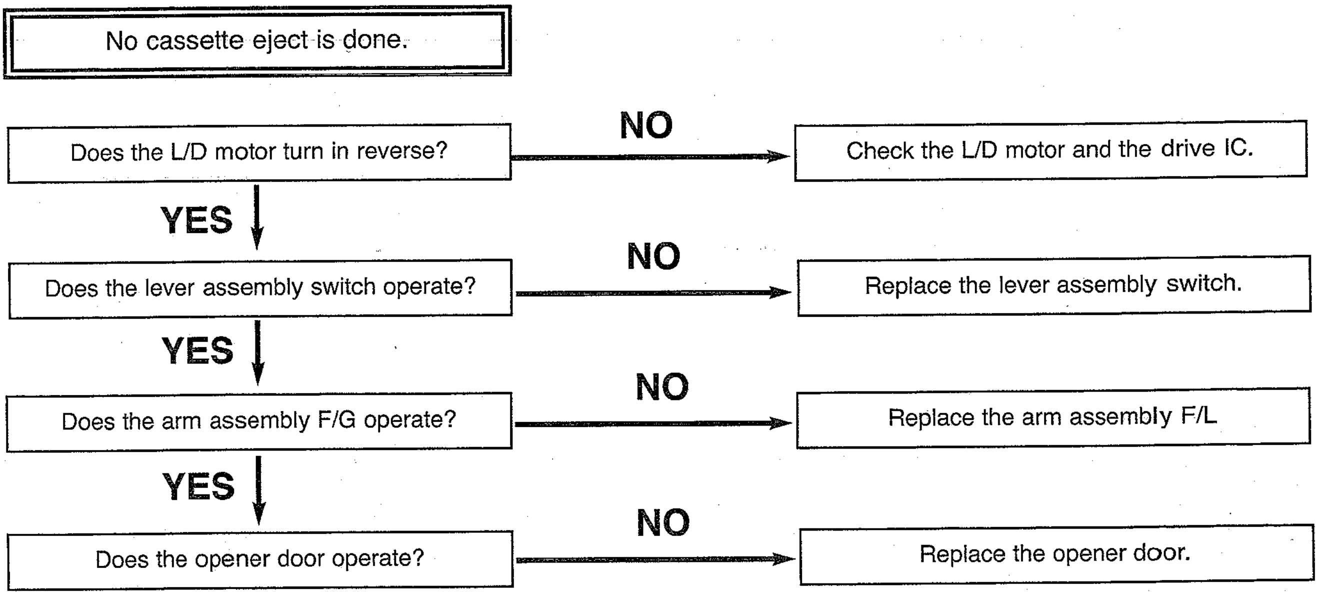
MECHANISM TROUBLESHOOTING GUIDE

2. Front Loading Mechanism

A.

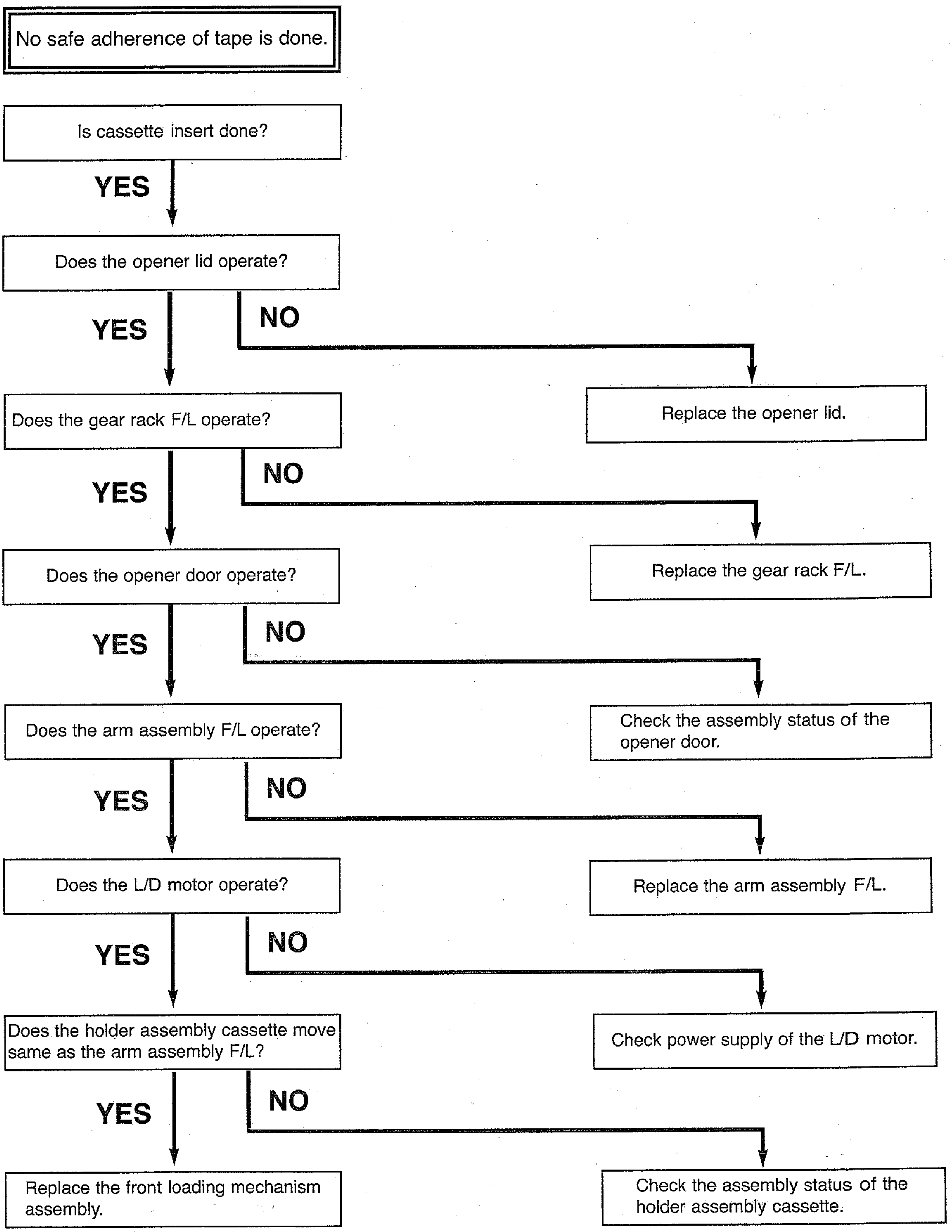

No cassette insert is done.
Does the lever assembly switch operate?
NO
Is the lever assembly switch spring normal?
NO
Add or replace the lever assembly switches spring.
YES
Does the CST IN switch operate normally?
NO
Replace the F/L switch.
YES
Check the Syscon circuit.
YES
Is the Vcc of the main P.C.B assembly?
YES
NO
Check the power circuit.
Is voltage between the cassette switch terminal and the GND on the main P.C.B assembly?
YES
NO
Check the mode switch position and the Syscon circuit.
Is there short between the cassette switch terminal and the GND on the main P.C.B assembly?
YES
NO
Replace the main P.C.B assembly or remove the short part.
Replace the CST IN switch.

B.


No cassette eject is done.
Does the L/D motor turn in reverse?
NO
Check the L/D motor and the drive IC.
YES
Does the lever assembly switch operate?
NO
Replace the lever assembly switch.
YES
Does the arm assembly F/G operate?
NO
Replace the arm assembly F/L
YES
Does the opener door operate?
NO
Replace the opener door.

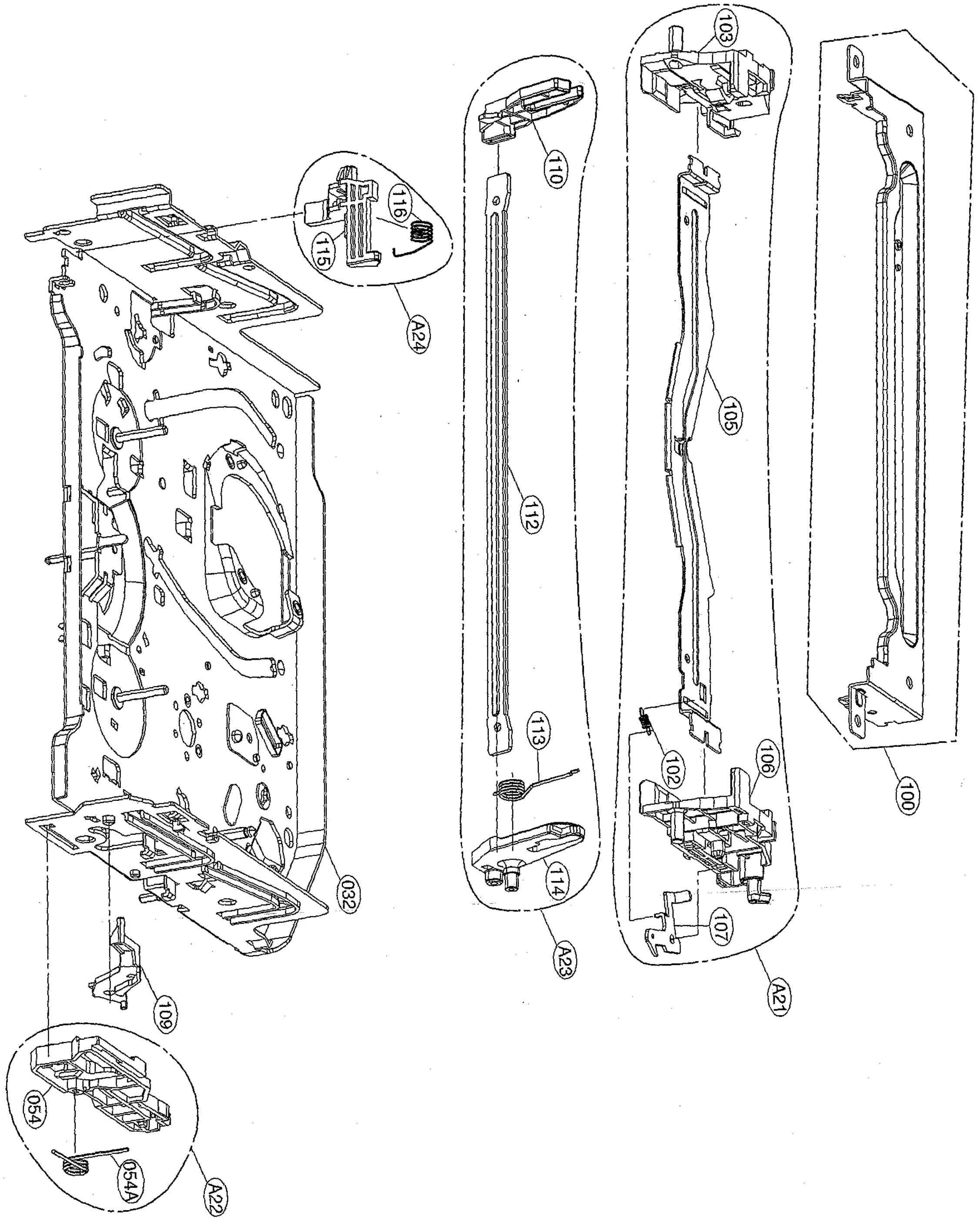
MECHANISM TROUBLESHOOTING GUIDE

C.


No safe adherence of tape is done.
Is cassette insert done?
YES
Does the opener lid operate?
YES
NO
Replace the opener lid.
Does the gear rack F/L operate?
YES
NO
Replace the gear rack F/L.
Does the opener door operate?
YES
NO
Check the assembly status of the opener door.
Does the arm assembly F/L operate?
YES
NO
Replace the arm assembly F/L.
Does the L/D motor operate?
YES
NO
Check power supply of the L/D motor.
Does the holder assembly cassette move same as the arm assembly F/L?
YES
NO
Replace the front loading mechanism assembly.
Check the assembly status of the holder assembly cassette.

EXPLODED VIEWS

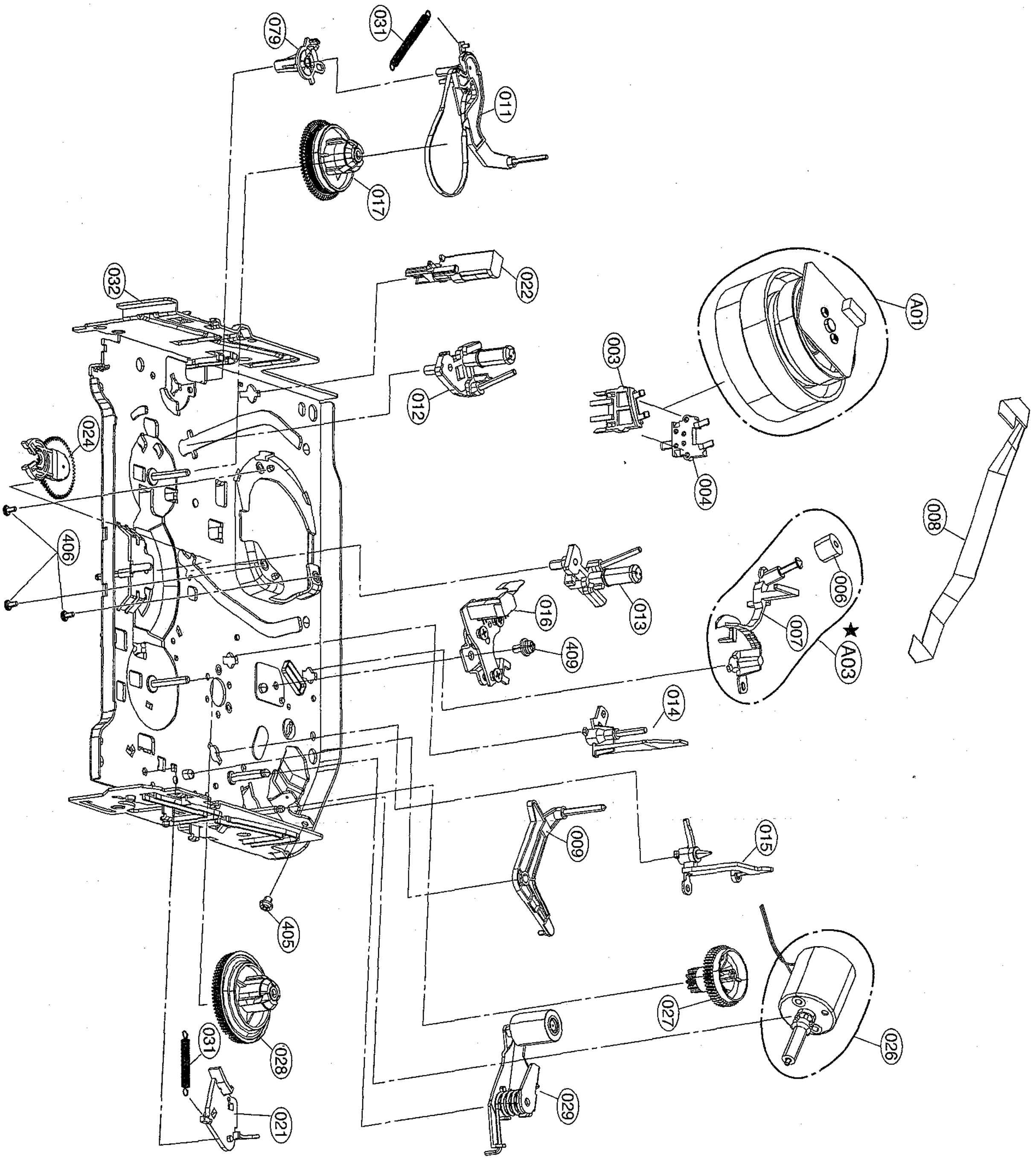
1. Front Loading Mechanism Section


103
110
116
115
A24
105
112
113
102
106
100
114
107
A23
A21
032
109
054
054A
A22

EXPLODED VIEWS

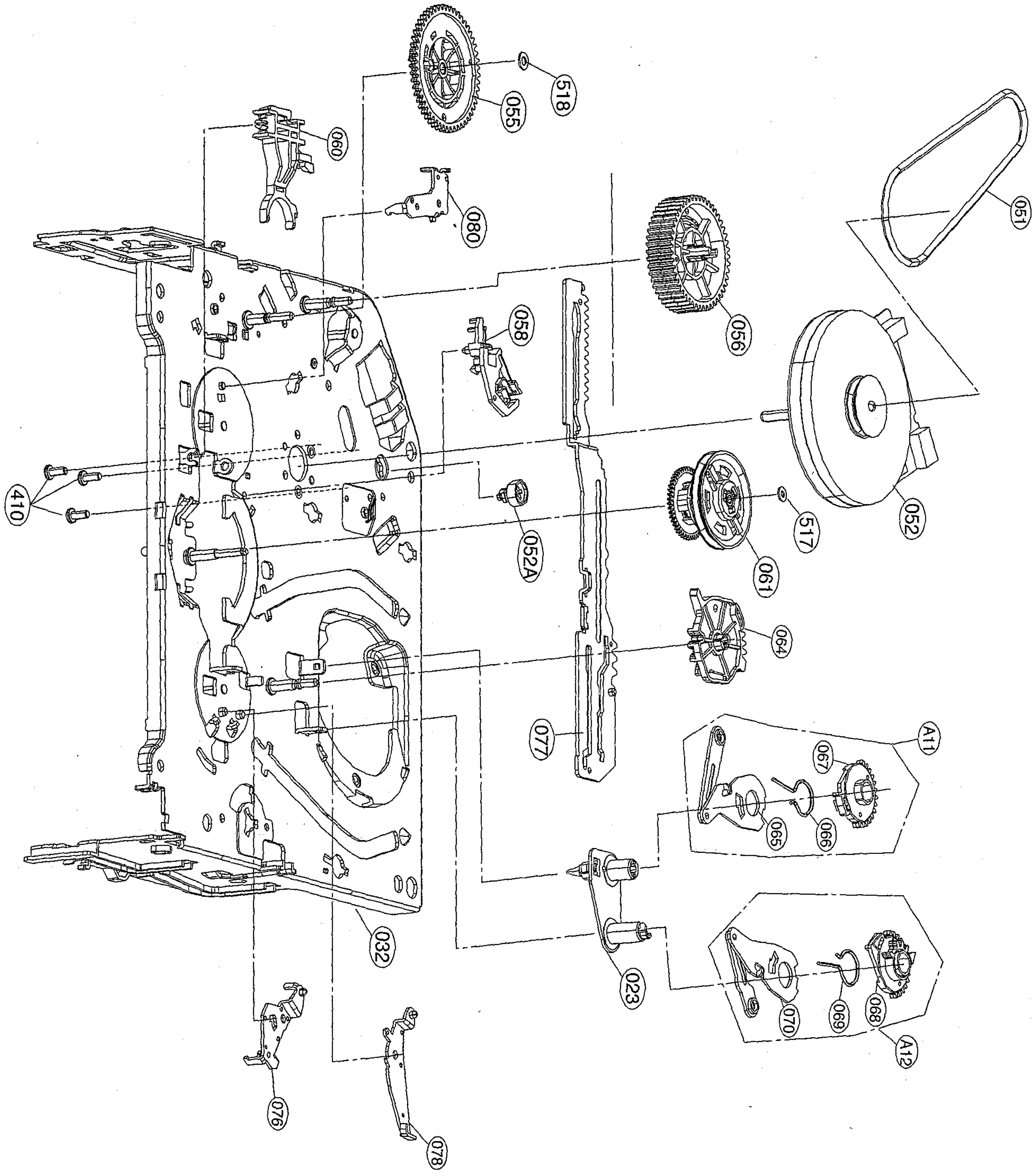
2. Moving Mechanism Section (1)

★ OPTIONAL PART


079
031
011
017
022
A01
032
003
012
024
004
008
406
006
016
013
007
409
★
A03
014
015
009
405
027
026
028
031
029
021

EXPLODED VIEWS

3. Moving Mechanism Section (2)


518
055
060
080
051
056
058
052
517
061
052A
410
064
077
A11
067
065
066
032
023
070
069
068
A12
076
078

MEMO

SECTION 5 MECHANISM OF DVD PART

CONTENTS

DECK MECHANISM PARTS LOCATIONS

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- Top View(without Tray Disc)..........5-1
- Bottom View..........5-1

DECK MECHANISM DISASSEMBLY

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  1-1. Clamp Assembly Disc..........5-2
    1-1-1. Plate Clamp..........5-2
    1-1-2. Magnet Clamp..........5-2
    1-1-3. Clamp Upper..........5-2

2. Tray Disc..........5-2

3. Base Assembly Sled..........5-3

  3-1. Gear Assembly Feed..........5-3
  3-2. Gear Assembly Middle..........5-3
  3-3. Gear Assembly Rack..........5-3

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6. Belt Loading..........5-4
7. Gear Pulley..........5-4
8. Gear Loading..........5-4
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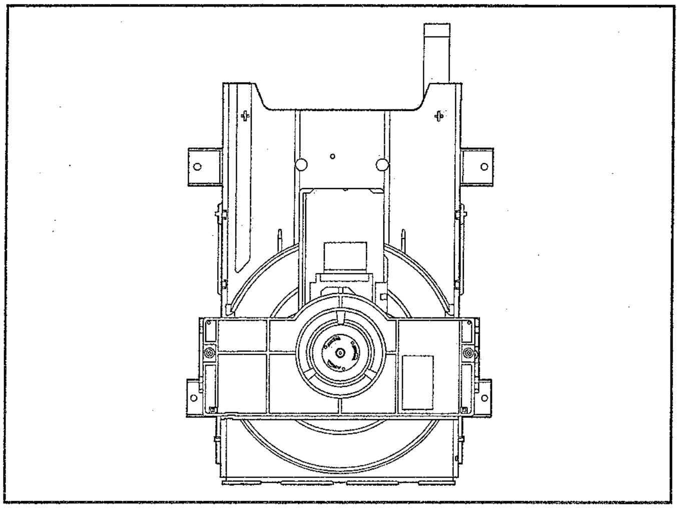
10. PWB Assembly Loading..........5-4
11. Base Main..........5-4

EXPLODED VIEW

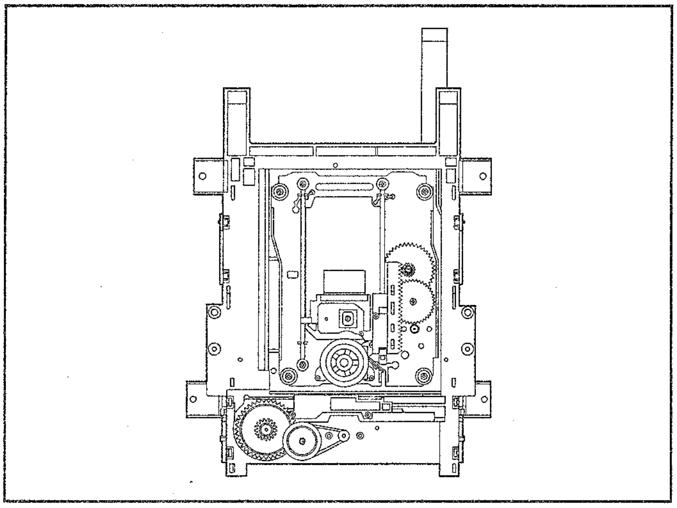
1. Deck Mechanism Exploded View....5-5

DECK MECHANISM PARTS LOCATION

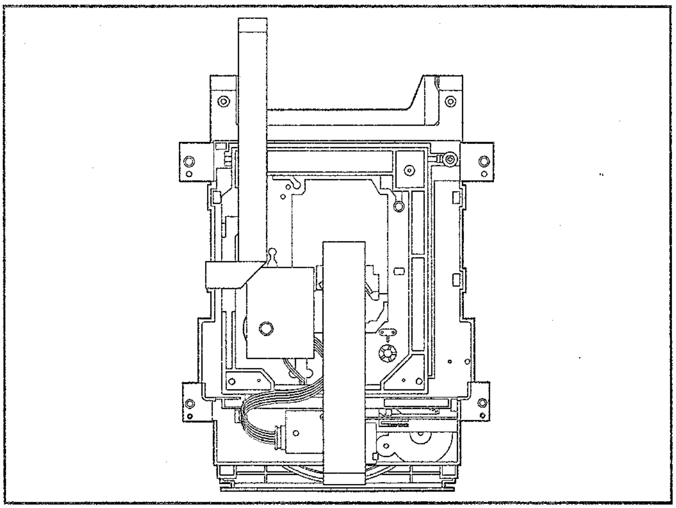
• Top View (With Tray)



• Top View (Without Tray)



• Bottom View



Procedure		Parts	Fixing Type	Disassembly	Figure
Starting No.					
	1	Holder Clamp	2 Screws, 2 Locking Tabs		5-1
1	2	Clamp Assembly Disc			5-1
1, 2	3	Plate Clamp			5-1
1, 2, 3	4	Magnet Clamp			5-1
1, 2, 3, 4	5	Clamp Upper			5-1
1	6	Tray Disc			5-2
1, 6	7	Base Assembly Sled	4 Screws,		5-3
1, 2, 6	8	Gear Assembly Feed			5-3
1, 2, 6, 8	9	Gear Middle			5-3
1, 2, 6, 8, 9	10	Gear Assembly Rack	1 Screw		5-3
1, 2, 7	11	Rubber Rear			5-3
1, 2, 7	12	Frame Assembly Up/Down	1 Screw	Bottom	5-4
1, 2	13	Belt Loading	1 Locking Tab		5-4
1, 2 ,13	14	Gear Pulley			5-4
1, 2, 13, 14	15	Gear Loading	1 Locking Tab		5-4
1, 2, 7, 12, 13, 14	16	Guide Up/Down			5-4
1, 2, 13	17	PWB Assembly Loading	1 Locking Tab 1 Hook 2Screw	Bottom	5-4
1, 2, 7, 12, 13, 14, 15, 16, 17	18	Base Main			5-4

Note

When reassembling, perform the procedure in reverse order.

The "Bottom" on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

DECK MECHANISM DISASSEMBLY

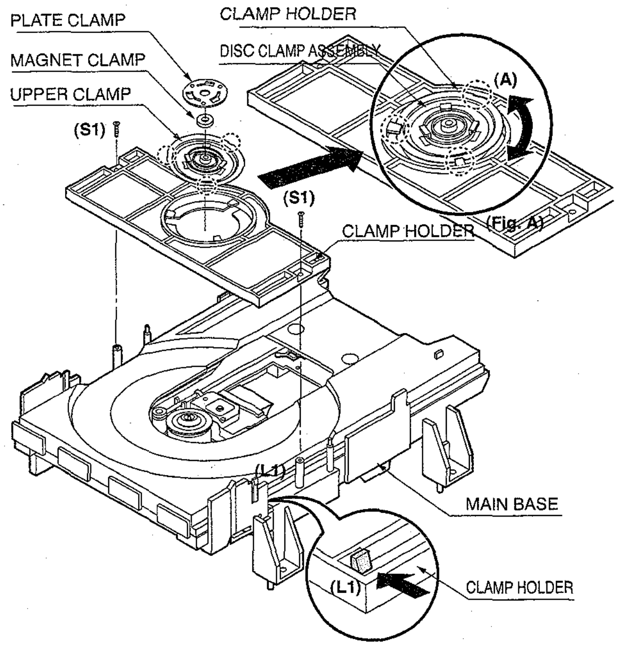


PLATE CLAMP
CLAMP HOLDER
MAGNET CLAMP
DISC CLAMP ASSEMBLY
UPPER CLAMP
(A)
(S1)
(S1)
CLAMP HOLDER
(Fig. A)
(L1)
MAIN BASE
(L1)
CLAMP HOLDER

Fig. 5-1

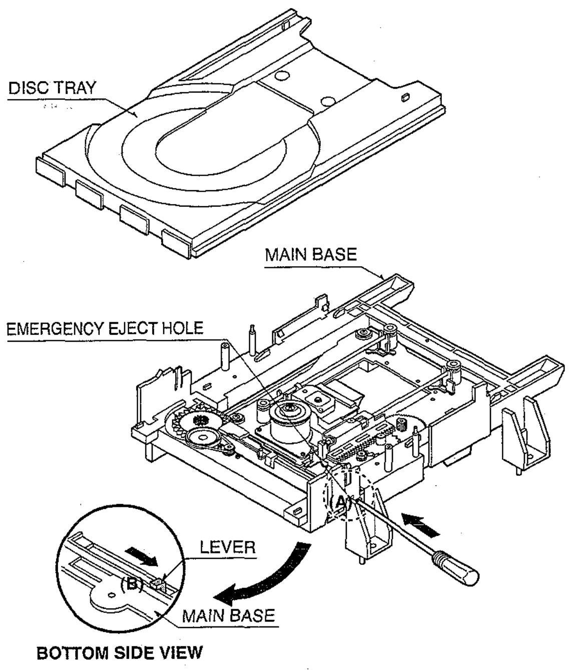

DISC TRAY
MAIN BASE
EMERGENCY EJECT HOLE
(A)
LEVER
(B)
MAIN BASE
BOTTOM SIDE VIEW

Fig. 5-2

1. Holder Clamp (Fig. 5-1)

1) Release 2 Screws(S1).
2) Unhook 2 Locking Tabs(L1).
3) Lift up the Holder Clamp and then separate it from the Base Main.

1-1. Clamp Assembly Disc

1) Place the Clamp Assembly Disc as Fig. (A)
2) Lift up the Clamp Assembly Disc in direction of arrow(A).
3) Separate the Clamp Assembly Disc from the Holder Clamp.

1-1-1. Plate Clamp

1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

1-1-2. Magnet Clamp

1-1-3. Clamp Upper

2. Tray Disc (Fig. 5-2)

1) Insert and push a Driver in the emergency eject hole(A) at the right side, or put the Driver on the Lever(B) of the Gear Emergency and pull the Lever(B) in direction of arrow so that the Tray Disc is ejected about 15~20mm.
2) Pull the Tray Disc until it is separated from the Base Main completely.

DECK MECHANISM DISASSEMBLY

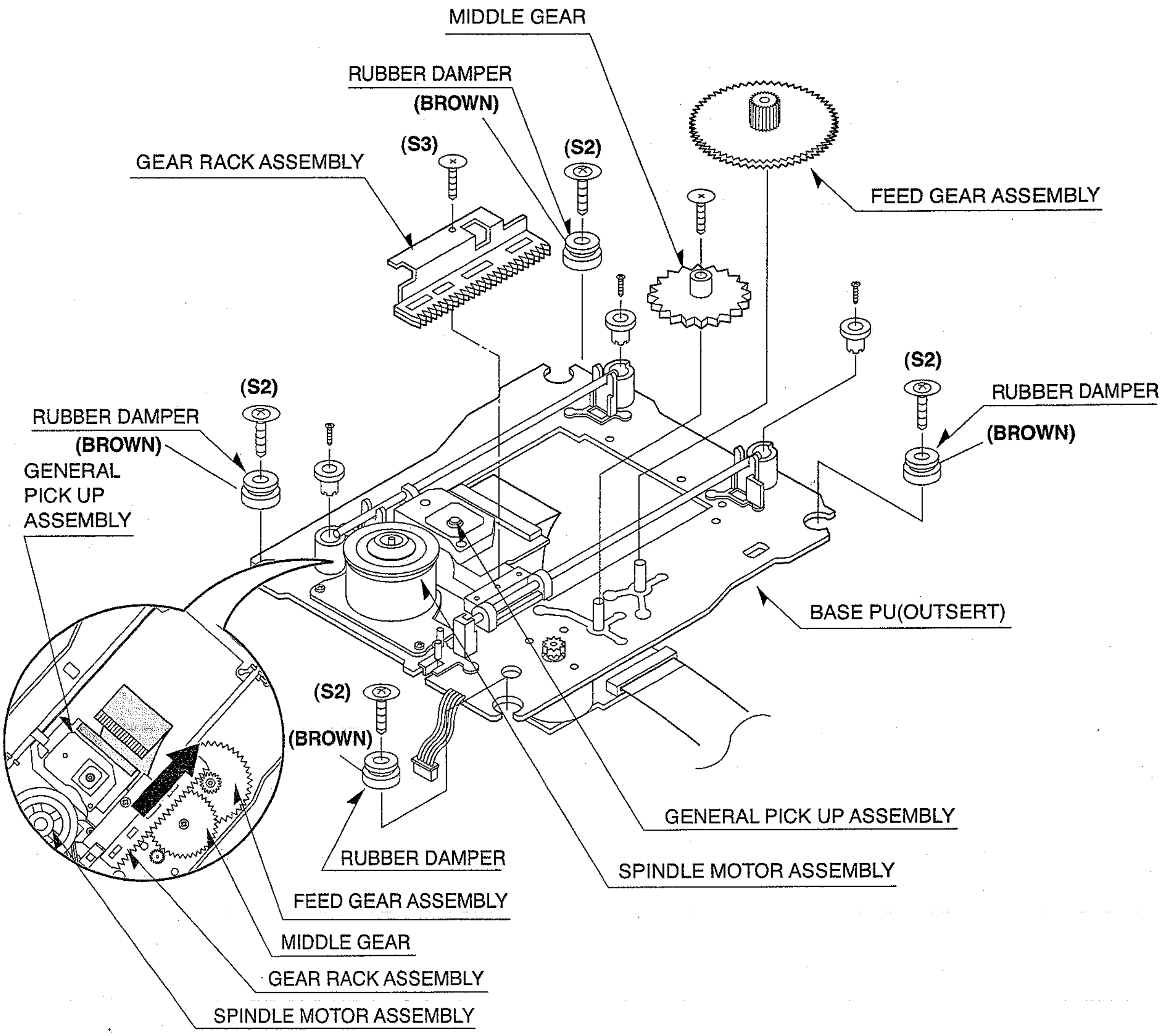

MIDDLE GEAR
RUBBER DAMPER
(BROWN)
(S3)
(S2)
GEAR RACK ASSEMBLY
FEED GEAR ASSEMBLY
(S2)
RUBBER DAMPER
(BROWN)
(S2)
RUBBER DAMPER
(BROWN)
GENERAL PICK UP ASSEMBLY
BASE PU(OUTSERT)
(S2)
(BROWN)
GENERAL PICK UP ASSEMBLY
RUBBER DAMPER
SPINDLE MOTOR ASSEMBLY
FEED GEAR ASSEMBLY
MIDDLE GEAR
GEAR RACK ASSEMBLY
SPINDLE MOTOR ASSEMBLY

Fig. 5-3

3. Base Assembly Sled (Fig. 5-3)

1) Release 4 Screw(S2).
2) Disconnect the FFC Connector(C1)

3-1. Gear Assembly Feed

3-2. Gear Middle

3-3. Gear Assembly Rack

1) Release the Scerw(S3)

4. Rubber Rear (Fig. 5-3)

DECK MECHANISM DISASSEMBLY

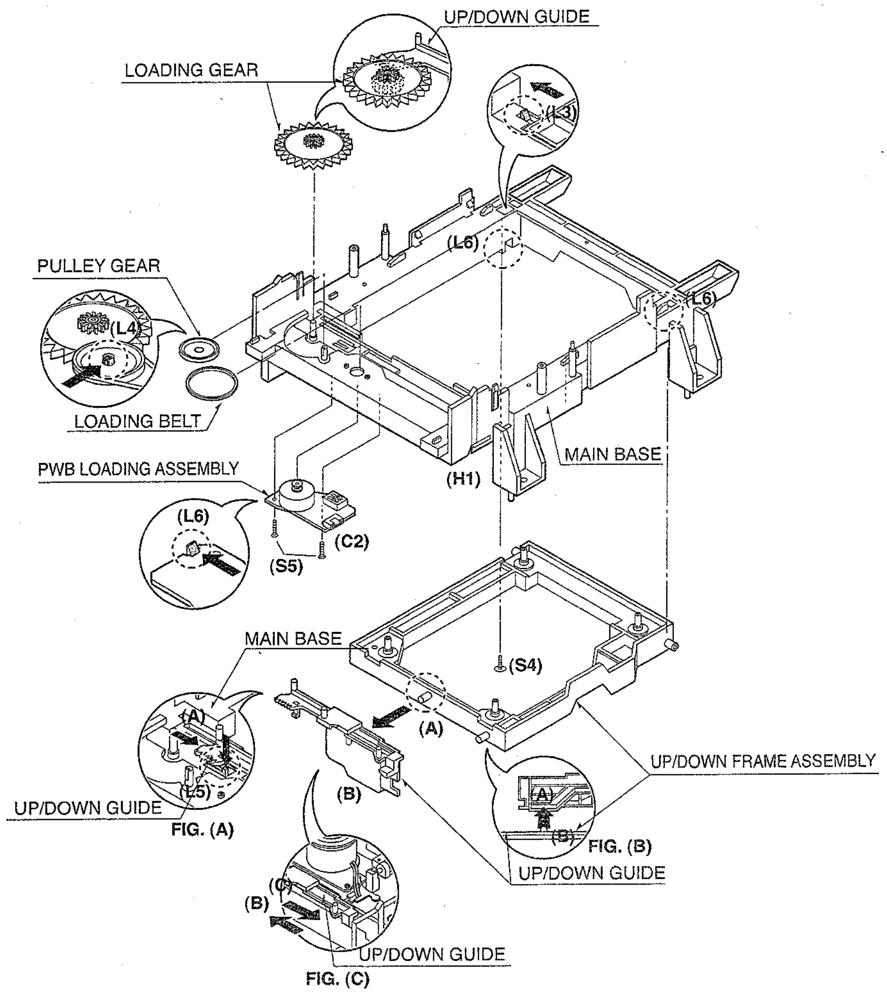

UP/DOWN GUIDE
LOADING GEAR
(L3)
(L6)
PULLEY GEAR
(L4)
LOADING BELT
PWB LOADING ASSEMBLY
(L6)
(C2)
(S5)
(H1)
MAIN BASE
MAIN BASE
(S4)
(A)
(A)
(L5)
UP/DOWN GUIDE
FIG. (A)
(B)
UP/DOWN FRAME ASSEMBLY
(A)
(B)
FIG. (B)
UP/DOWN GUIDE
(C)
(B)
UP/DOWN GUIDE
FIG. (C)

Fig. 5-4

5. Frame Assembly Up/Down (Fig. 5-4)

Note

Put the Base Main face down(Bottom Side)

1) Release the Screw(S4)
2) Unlock the Locking Tab(L3) in direction of arrow and then lift up the Frame Assembly Up/Down to separate it from the Base Main.

Note

- When reassembling move the Guide Up/Down in direction of arrow(C) until it is positioned as Fig.(C).
- When reassembling insert (A) portion of the Frame Assembly Up/Down in the (B) portion of the Guide Up/Down as Fig.(B)

6. Belt Loading(Fig. 5-4)

Note

Put the Base Main on original position(Top Side)

7. Gear pulley (Fig. 5-4)

1) Unlock the Locking Tab(L4) in direction of arrow(B) and then separate the Gear Pulley from the Base Main.

8. Gear Loading (Fig. 5-4)

9. Guide Up/Down (Fig. 5-4)

1) Move the Guide Up/Down in direction of arrow(A) as Fig.(A)
2) Push the Locking Tab(L5) down and then lift up the Guide Up/Down to separate it from the Base Main.

Note

When reassembling place the Guide Up/Down as Fig.(C) and move it in direction arrow(B) until it is locked by the Locking Tab(L5). And confirm the Guide Up/Down as Fig.(A)

10. PWB Assembly Loading (Fig. 5-4)

Note

Put the Base Main face down(Bottom Side)

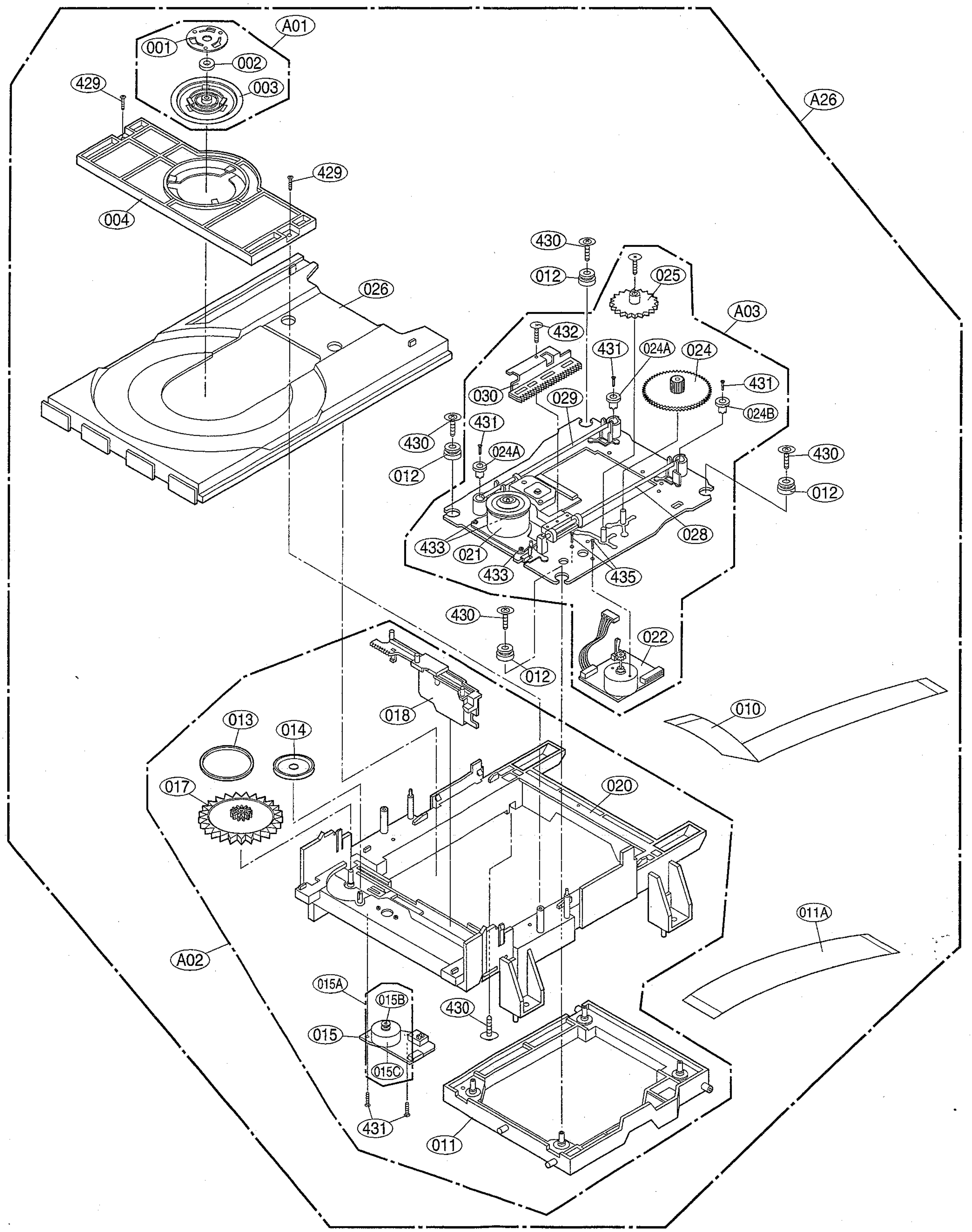
1) Release 2 Screws(S5)
2) Unlock the Loading Motor (C2) from the Hook (H1) on the Base Main.
3) Unlock 2 Locking Tabs(L6) and separate the PWB Assembly Loading from the Base Main.

11. Base Main(Fig. 5-4)

MEMO

EXPLODED VIEWS

1. Deck Mechanism Exploded View


A01
001
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024B
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011A
A02
015A
015B
430
015
015C
431
011

MEMO

MEMO

NOTES) If you want to purchase
Flash memory, you must order
"IC6A1A"

NOTES) ⚠ Warning
Parts that are shaded are critical
With respect to risk of fire or
electricial shock.

SECTION 6 REPLACEMENT PARTS LIST

MODEL : VC8505P1K(DVD-VCR 4350)QUELLE **NSP : Not available as service parts.**

RUN DATE :14-DEC-04

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		*** INDIVIDUAL PARTS ***				
		250	3110R-V024A	CASE	ONE BOARD PRESS A288G BACK3 SI	
		274	3300R-V075A	PLATE	ONE BOARD SLIM PRESS A/V JACK	
⚠		300	6410RCHP02D	POWER CORD	HIT-102/H03VHH2-F (ST-HS:80MM)	
		457	353-051E	SCREW,DRAWING	SPECIAL (3X12)	
		462	353-051K	SCREW,DRAWING	+ 2 D3.0 - MSWR3/FN L23.5 X13.	
		467	353-051G	SCREW,DRAWING	+ 2 D3.0 L8.0 MSWR3/FN TB ROUN	
		*** PACKING ACCESSORY ***				
		801	3835RV0025W	INSTRUCTION ASSEMBLY		
		802	3890R-C391A	BOX		
		803	3920R-E104A	PACKING,CASING	V89/88 0.02 80 EPS 4 937 1984	
		804	292-053B	BAG	SOFT(MIDI)	NSP
		808	534-008C	BATTERY,MANGANESE	AAAM(R03) SEOTONG 1-5 V - 1PA	
		810	6851R-0056B	CABLE ASSEMBLY	PAL RF 1.2M + 2WAY R/W 1.2M FR	
		811	6850R-CAA2H	CABLE,COAXIAL	RF PAL DOUBLE SHIELD DT_HY_HIT	
		812	6850R-PBA2H	CABLE,COAXIAL	2 WAY COAXIAL RED_WHITE DT_HY_	
		*** REMOTE CONTROLLER ***				
		900	6711R1P081C	REMOTE CONTROLLER ASSEMBLY	V2 VC8817P1K LG W/SHOWVIEW	
		*** PANEL ASSEMBLY , FRONT ***				
		A43	3721R-F998A	PANEL ASSEMBLY,FRONT[NORMAL PA		
		280	3720R-F765T	PANEL,VIDEO		NSP
		283	3580R-V094D	DOOR	VCR VC8506P1K MOLD NA6SLL	
		284	442-681A	SPRING	DOOR	
		285	3580R-T128D	DOOR	VCR VC8506P1K MOLD NA6SLL	
		286	4970R-0146A	SPRING	COIL HDR	
		*** DECK ASSEMBLY(VCR) ***				
		A00	6721RF0954B	DECK ASSEMBLY,VIDEO	DECK/MECHA D37(M) DI (4HF,PAL,	NSP
		A01	6723R-0603F	DRUM(CIRC) ASSEMBLY	DECK/MECHA (9P6S) D37-6CH PAL	
		A03	4261R-0039A	ARM ASSEMBLY	DECK/MECHA CLEANER - D37	
		A11	4471R-0017A	GEAR ASSEMBLY	DECK/MECHA P3 - D37	
		A12	4471R-0015A	GEAR ASSEMBLY	DECK/MECHA P2 - D37	
		A21	4931R-0084A	HOLDER ASSEMBLY	DECK/MECHA CST - D37	
		A22	4471R-0016A	GEAR ASSEMBLY	DECK/MECHA RACK F/L - D37	
		A23	4261R-0038A	ARM ASSEMBLY	DECK/MECHA F/L - D37	
		A24	4511R-0005A	LEVER ASSEMBLY	SWITCH(C) - D37	
		003	4930R-0449A	HOLDER	DECK/MECHA FPCB(6CH) - D37C MO	
		004	5006R-0045A	CAP	DECK/MECHA FPCB - D37C MOLD	
		006	4580R-0004A	ROLLER	CLEANER	
		007	4260R-0053A	ARM	DECK/MECHA CLEANER MOLD - D37	NSP
		008	6850R-HG18Y	CABLE,FLAT	P=1.25 FFC UL2896(0.05X0.8) 7	
		009	4260R-0056A	ARM	DECK/MECHA T/UP OTHER - D37	
		011	4261R-0040A	ARM ASSEMBLY	DECK/MECHA TENSION - D37	
		012	3041R-M037A	BASE ASSEMBLY	P2 -D37	
		013	3041R-M038A	BASE ASSEMBLY	P3 - D37	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		014	3041R-M039A	BASE ASSEMBLY	P4 - D37	
		015	5870R-0007A	OPENER	DECK/MECHA LID OTHER - D37	
		016	3041R-M036A	BASE ASSEMBLY	A/C HEAD (ALPS) - D37	
		016	3041R-M036B	BASE ASSEMBLY	A/C HEAD (TDK) - D37	
		017	4408R-0005A	REEL	DECK/MECHA S OTHER - D37	
		021	4421R-M002A	BRAKE ASSEMBLY	T - D37	
		022	6520D00004B	HEAD(CIRC)	ST ST FE HEAD FOR D37 13.5	
		023	3040R-M056A	BASE	LOADING OTHER - D37	
		024	4261R-0041A	ARM ASSEMBLY	DECK/MECHA IDLER(H)	
		026	4681RF0039A	MOTOR ASSEMBLY	DECK/MECHA L/D - (DI) D37	NSP
		027	4470R-0133A	GEAR	DECK/MECHA WHEEL OTHER - D37	
		028	4408R-0006A	REEL	DECK/MECHA T OTHER - D37	
		029	4261R-0037A	ARM ASSEMBLY	DECK/MECHA PINCH - D37	
		031	4970R-0175A	SPRING	COIL TENSION - D37	
		032	3141R-M002A	CHASSIS ASSEMBLY	D37	NSP
		051	4400R-0005A	BELT	CAPSTAN	
		052	4680R-A015A	MOTOR(MECH)	CAPSTAN F2QVB66 SANKYO FOR D37	
		052	4680R-A016A	MOTOR(MECH)	CAPSTAN MCVC-037AA LGIT FOR D3	
		052	4680R-A017A	MOTOR(MECH)	CAPSTAN DMVCMC20L SAMSUNG FOR	
		052A	4980R-0029A	SUPPORTER	DECK/MECHA CAPSTAN OTHER - D37	
		054	4470R-0136A	GEAR	DECK/MECHA RACK F/L OTHER - D3	
		054A	4970R-0171A	SPRING	COIL RACK F/L - D37	
		055	4470R-0140A	GEAR	DECK/MECHA DRIVE OTHER - D37	
		056	4470R-0139A	GEAR	DECK/MECHA CAM OTHER - D37	
		058	4421R-M001A	BRAKE ASSEMBLY	CAPSTAN -D37	
		060	4510R-0065A	LEVER	DECK/MECHA F/R OTHER - D37	
		061	4265R-0008A	CLUTCH ASSEMBLY	DECK/MECHA D37(M)	
		064	4470R-0141A	GEAR	DECK/MECHA SECTOR OTHER - D37	
		065	4261R-0044A	ARM ASSEMBLY	DECK/MECHA P3 - D37	
		066	4970R-0122A	SPRING	COIL D35	NSP
		067	4470R-0135A	GEAR	DECK/MECHA P3 OTHER - D37	NSP
		068	4470R-0134A	GEAR	DECK/MECHA P2 OTHER - D37	NSP
		069	4970R-0122A	SPRING	COIL D35	NSP
		070	4261R-0043A	ARM ASSEMBLY	DECK/MECHA P2 - D37	NSP
		076	4510R-0063A	LEVER	DECK/MECHA SPRING OTHER - D37	
		077	3300R-M203A	PLATE	SLIDER OTHER - D37	
		078	4510R-0062A	LEVER	DECK/MECHA TENSION OTHER - D37	
		079	3040R-M057A	BASE	TENSION OTHER - D37	
		080	4510R-0064A	LEVER	DECK/MECHA BRAKE OTHER - D37	
		100	3301R-M193A	PLATE ASSEMBLY	TOP - D37	
		102	4970R-0173A	SPRING	COIL STOPPER - D37	
		103	4930R-0452A	HOLDER	DECK/MECHA SIDE (L) OTHER - D3	NSP
		105	4930R-0450A	HOLDER	DECK/MECHA CST OTHER - D37	NSP
		106	4930R-0451A	HOLDER	DECK/MECHA SIDE(R) OTHER - D37	NSP
		107	4510R-0061A	LEVER	DECK/MECHA STOPPER OTHER - D37	NSP
		109	5870R-0008A	OPENER	DECK/MECHA DOOR OTHER - D37	
		110	4260R-0051A	ARM	DECK/MECHA F/L(L) OTHER - D37	NSP
		112	3070R-0002A	BODY	F/L	NSP
		113	4970R-0169A	SPRING	COIL F/L(R) - D37	NSP
		114	4260R-0052A	ARM	DECK/MECHA F/L (R) OTHER - D37	NSP
		115	4510R-0070A	LEVER	DECK/MECHA SWITCH(C) OTHER - D	
		116	4970R-0163A	SPRING	COIL D35S SWITCH	
		405	1MPC0301499	SCREW MACHINE,PAN HEAD	D3.0 L4.0 SWRCH18A/FZY	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		406	1MEC0302018	PAN HEAD MACHINE SCREW S/W +	D 3.0 L 6.0 MSWR3/FZY	
		409	1SZZR-0032B	SCREW,DRAWING	+ 1 D2.6 L5.0 SWRCH18A/FZY TAP	
		410	1APF0262218	SCREW TAP TITE(B),PAN HEAD	D2.6 L6.8 MSWR3/FZY	
		517	1WZZR-0004D	WASHER,DRAWING	STOPPER	
		518	1WZZR-0004A	WASHER,DRAWING	STOPPER	
		***** DECK ASSEMBLY , VIDEO (DVD MD) *****				
		A26	6721RF0384C	DECK ASSEMBLY,VIDEO	DVD DP-7C 1 BOARD SLIM	NSP
		A01	4861R-0016C	CLAMP ASSEMBLY	DECK/MECHA DISC DP-7 (DI)	
		A02	3041R-D014A	BASE ASSEMBLY	MAIN(DP-7C 1 BOARD SLIM)	
		A03	3041R-M026A	BASE ASSEMBLY	SLED DP-7C 1 BOARD	
		001	3300R-0547A	PLATE	CLAMP	NSP
		002	5016H-1016B	MAGNET	CLAMP(LDM-R608,10*5,1*1.5T)	NSP
		003	4860R-0021A	CLAMP	UPPER DP7	NSP
		004	4930R-0171A	HOLDER	CLAMP	
		010	6850R-JK18Z	CABLE,FLAT	P=1.0 FFC UL2896(0.035X0.7) 11	
		011	3210R-M002A	FRAME	UP/DOWN MOLD DP7C	
		011A	6850R-JW20Z	CABLE,FLAT	P=1.0 FFC UL2896(0.035X0.7) 23	
		012	5040R-0075B	RUBBER	DAMPER DP7 (CHUNG PUNG 30)	
		012	5040R-0075D	RUBBER	DAMPER DP7 (YAMAUCHI 30)	
		013	4400R-0006B	BELT	DECK/MECHA DP2-5, DP7C,DP7A OT	
		014	4470R-0055A	GEAR	PULLEY	
		015	6871RZ5130A	PWB(PCB) ASSEMBLY,OTHERS	SUB,L/D (DP-4V,DVD+VCR) DI	
		015A	4681R-1023E	MOTOR ASSEMBLY	LOADING (DI)	
		015B	4560R-0008A	PULLEY	MOTOR	
		015C	4680HP2001A	MOTOR(MECH)	RF-300CH-11440(SHAFT 6.05L)M/C	
		015C	4680R-E009A	MOTOR(MECH)	FEEDING RF300EH-1D390 MABUCHI	
		015C	4680R-E010A	MOTOR(MECH)	FEEDING BCZ3B51 SANKYO FOR DP7	
		015C	4680HP2011A	MOTOR(MECH)	PC200DG-21651C JOHNSON LOADING	
		015C	4680R-D003A	MOTOR(MECH)	LOADING RF-300EH-1D390 MABUCHI	
		017	4470R-0056A	GEAR	LOADING	
		018	4974R-0023A	GUIDE	UP/DOWN	
		020	3040R-D006A	BASE	DP-7C(04.COMBI) MOLD 1-BOARD	NSP
		021	4680R-C011A	MOTOR(MECH)	SPINDLE JCL9B68 SANKYO FOR COM	
		022	4681R-0034C	MOTOR ASSEMBLY	DECK/MECHA FEED DP-7C(DI)	
		024	4470R-0131A	GEAR	PINION DP7C	
		024A	5006R-0044A	CAP	SKEW-T DP7C	
		024B	5006R-0043A	CAP	SKEW DP7C	
		025	4470R-0130A	GEAR	MIDDLE DP7C	
		026	3390R-0017A	TRAY	DVD DISC(DP-7C-SLIM) MOLD	
		028	4370R-0082B	SHAFT	DECK/MECHA PU R DP-7C OTHER	
		029	4370R-0082A	SHAFT	PU DP-7C	
		030	4471R-0013C	GEAR ASSEMBLY	DECK/MECHA RACK DP-7C(7A) DI	
		031	6716DPH005B	PICK UP,DVD	PVR-502W R52 0219 MITSUMI PLAY	
		429	1SZZR-0012A	SCREW,DRAWING	B-TITE	
		430	1SZZH-1003A	SCREW,DRAWING	+ D2.0 6MM SWRCH16A/NIY 4.5MM	
		430	1SZZH-1003A	SCREW,DRAWING	+ D2.0 6MM SWRCH16A/NIY 4.5MM	
		431	1SZZH-1007B	SCREW,DRAWING	+ D2.0 6MM SWRCH16A/ZNBK 4MM 1	
		431	1SZZH-1007B	SCREW,DRAWING	+ D2.0 6MM SWRCH16A/ZNBK 4MM 1	
		433	1SZZR-0050A	SCREW,DRAWING	+ 1 D2.0 L4.5 SWRCH16A/ZNY S-T	
		435	1SZZR-0011A	SCREW,DRAWING	MACHINE	
		***** BOARD (MAIN) *****				
		A44	**3141R-V017D**	**CHASSIS ASSEMBLY**		NSP
		260	3210R-V011B	FRAME	COMBI 3 MOLD HIPS 60HR BK	NSP

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		261A	5040H-1016U	RUBBER	VCR SLIM-COMBI OTHER DS08*D22	
		265	4930R-0384A	HOLDER	POWER CORD	
		330	3140R-V010A	CHASSIS	ONE BOARD PRESS SECC 0.8T	
		452	353-051A	SCREW,DRAWING	SPECIAL	
		465	353-046K	SCREW,DRAWING	SPECIAL (3X10 B.K)	
		467	353-051G	SCREW,DRAWING	+ 2 D3.0 L8.0 MSWR3/FN TB ROUN	
		468	353-051J	SCREW,DRAWING	+ 2 D3.0 L6.5 MSWR3/FN TB ROUN	
		A46	**3501R-9775W**	**BOARD ASSEMBLY**		
		323	3111R-0089E	CASE ASSEMBLY	PRE AMP SLIM COMBI C-CORE A NO	
		BC91	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		BC92	636-004C	FILTER(CIRC),EMC	BEAD CORE BFS3550R2FD8,R T/P	
		C126	0CE2276H638	CAPACITOR,FIXED ELECTROLYTIC	220UF SMS,SG 25V 20% FM5 TP 5	
		C128	0CE3376D638	CAPACITOR,ELECTROLYTIC	330UF SMS 10V M FM5 TP5	
		C151	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C152	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C153	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C154	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C155	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C162	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C201	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C202	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C203	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C206	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C207	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C208	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C211	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C212	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C213	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C214	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C231	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C232	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C233	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C234	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C239	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C240	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.015UF 50V 10% X7R(X) 1608 R/	
		C241	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C243	0CH4561K412	CAPACITOR,FIXED CERAMIC(High d	560PF 50V 5% NP0 1608 R/TP	
		C244	0CH4561K412	CAPACITOR,FIXED CERAMIC(High d	560PF 50V 5% NP0 1608 R/TP	
		C245	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C251	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C252	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C253	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C254	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C255	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C257	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C258	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C259	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C260	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C261	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C262	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C263	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C264	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.015UF 50V 10% X7R(X) 1608 R/	
		C265	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C266	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C267	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C268	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C269	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C270	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C271	0CH4391K412	CAPACITOR,CHIP[CERAMIC M/L TC	390PF 50V J NP0 1508 R/TP	
		C272	0CH4391K412	CAPACITOR,CHIP[CERAMIC M/L TC	390PF 50V J NP0 1508 R/TP	
		C273	0CH1333K562	CAPACITOR,CHIP[CERAMIC M/L HD	0.033UF 50V K X7R(X) 1508 R/TP	
		C274	0CH4471K412	CAPACITOR,CHIP[CERAMIC M/L TC	470PF 50V J NP0 1508 R/TP	
		C276	0CH4100K112	CHIP CAPA CERAMIC M/L T.C F/S	10P 50V D COG 1.6X0.8 R/TP	
		C277	0CH1153K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.015UF 50V 10% X7R(X) 1608 R/	
		C278	0CH4270K412	CAPACITOR,CHIP[CERAMIC M/L TC	27PF 50V J NP0 1608 R/TP	
		C279	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C280	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C281	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C282	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C283	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C291	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C292	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C293	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C295	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C296	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C297	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C298	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C301	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C302	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C303	0CH1122K562	CAPACITOR,FIXED CERAMIC(Temp.c	1200PF 50V 10% X7R(X) 1608 R/T	
		C304	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C305	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C306	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C307	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C308	0CQ1532K409	CAPACITOR,FIXED FILM	0.015UF S 50V 5% PE TP5	
		C309	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C310	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C311	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C312	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C314	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C315	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC	2.2UF SRA,SS 50V 20% FM5 TP 5	
		C316	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C317	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C318	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C319	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C320	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C321	0CH4680K412	CAPACITOR,FIXED CERAMIC(HIGH D	68PF 50V 5% NP0 1608 R/TP	
		C322	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C323	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C324	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C325	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C326	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C327	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C328	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C329	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C330	0CH1104K512	CAPACITOR,FIXED CERAMIC(Temp.c	0.1UF 50V 10% B(5YP) 1608 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C331	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C333	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C334	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C335	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C336	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C337	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C338	0CH1473K562	CAPACITOR,CHIP[CERAMIC M/L HD	47000PF 50V K X7R(X) 1608 R/TP	
		C339	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C340	0CH1473K562	CAPACITOR,CHIP[CERAMIC M/L HD	47000PF 50V K X7R(X) 1608 R/TP	
		C341	0CH1223K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.022UF 50V Z Y5V(F) 1508 R/TP	
		C342	0CH1104K512	CAPACITOR,FIXED CERAMIC(Temp.c	0.1UF 50V 10% B(5YP) 1608 R/TP	
		C343	0CH1473K562	CAPACITOR,CHIP[CERAMIC M/L HD	47000PF 50V K X7R(X) 1608 R/TP	
		C345	0CH1473K562	CAPACITOR,CHIP[CERAMIC M/L HD	47000PF 50V K X7R(X) 1608 R/TP	
		C346	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C347	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C348	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C349	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C350	0CH1104K512	CAPACITOR,FIXED CERAMIC(Temp.c	0.1UF 50V 10% B(5YP) 1608 R/TP	
		C351	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C353	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C355	0CH1104K512	CAPACITOR,FIXED CERAMIC(Temp.c	0.1UF 50V 10% B(5YP) 1608 R/TP	
		C356	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C357	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C358	0CH4680K412	CAPACITOR,FIXED CERAMIC(HIGH D	68PF 50V 5% NP0 1608 R/TP	
		C359	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C360	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C361	0CH1223K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.022UF 50V Z Y5V(F) 1508 R/TP	
		C362	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C363	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C366	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C367	0CH1104K512	CAPACITOR,FIXED CERAMIC(Temp.c	0.1UF 50V 10% B(5YP) 1608 R/TP	
		C368	0CH1822K562	CAPACITOR,FIXED CERAMIC(Temp.c	8200PF 50V 10% X7R(X) 1608 R/T	
		C370	0CH4820K412	CHIP CAPA CERAMIC M/L T.C F/S	82P 50V J COG 1.6X0.8 R/TP	
		C371	0CH4820K412	CHIP CAPA CERAMIC M/L T.C F/S	82P 50V J COG 1.6X0.8 R/TP	
		C372	0CH4820K412	CHIP CAPA CERAMIC M/L T.C F/S	82P 50V J COG 1.6X0.8 R/TP	
		C374	0CH1104K512	CAPACITOR,FIXED CERAMIC(Temp.c	0.1UF 50V 10% B(5YP) 1608 R/TP	
		C375	0CH1104K512	CAPACITOR,FIXED CERAMIC(Temp.c	0.1UF 50V 10% B(5YP) 1608 R/TP	
		C376	0CH1104K512	CAPACITOR,FIXED CERAMIC(Temp.c	0.1UF 50V 10% B(5YP) 1608 R/TP	
		C401	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C402	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C403	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C404	0CH1105D942	CAPACITOR,CHIP[CERAMIC M/L HD	1UF 10V Z Y5V(F) 1508 R/TP	
		C405	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C406	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C407	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C408	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C409	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C410	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C411	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C412	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C413	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C414	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C415	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C416	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C417	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C418	0CH4271K412	CAPACITOR,FIXED CERAMIC(HIGH D	270PF 50V 5% NP0 1608 R/TP	
		C419	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C420	0CE1074F638	CAPACITOR,ELECTROLYTIC	100U SRA 16V M FM5 TP(5)	
		C421	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C422	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C423	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C424	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C425	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C426	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C500	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C501	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C502	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C503	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C504	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C505	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C506	0CH1223K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.022UF 50V Z Y5V(F) 1508 R/TP	
		C508	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C509	0CH4220K412	CAPA,CHIP CERAMIC M/L T.C F/S	22P 50V J COG 1.6X0.8 R/TP	
		C511	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C512	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C513	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C514	0CH4120K412	CHIP CAPA CERAMIC M/L T.C F/S	12P 50V J COG 1.6X0.8 R/TP	
		C515	0CH4150K412	CAPA,CHIP CERAMIC M/L T.C F/S	15P 50V J COG 1.6X0.8 R/TP	
		C516	0CH1223K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.022UF 50V Z Y5V(F) 1508 R/TP	
		C517	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C518	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C519	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C520	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C521	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C523	0CE2254K638	CAPACITOR,FIXED ELECTROLYTIC	2.2UF SRA,SS 50V 20% FM5 TP 5	
		C524	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C525	0CH1105F942	CAPACITOR,FIXED CERAMIC(Temp.c	1000000PF 16V 80%,-20% Y5V(F)	
		C526	0CE4764J638	CAPACITOR,AL.ELECTROLYTIC	47UF SRA,SS 35V M FM5 TP 5	
		C527	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C533	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C534	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C535	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C543	0CH1222K512	CAPACITOR,CHIP[CERAMIC M/L HD	2200PF 50V K B 1608 R/TP	
		C544	0CH1473H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.0470UF 25V Z Y5V(F) 1608 R/T	
		C545	0CH1333K562	CAPACITOR,CHIP[CERAMIC M/L HD	0.033UF 50V K X7R(X) 1508 R/TP	
		C546	0CE4764J638	CAPACITOR,AL.ELECTROLYTIC	47UF SRA,SS 35V M FM5 TP 5	
		C547	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C551	0CH1333K562	CAPACITOR,CHIP[CERAMIC M/L HD	0.033UF 50V K X7R(X) 1508 R/TP	
		C552	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C561	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C564	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C567	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C570	0CH4150K412	CAPA,CHIP CERAMIC M/L T.C F/S	15P 50V J COG 1.6X0.8 R/TP	
		C571	0CH4150K412	CAPA,CHIP CERAMIC M/L T.C F/S	15P 50V J COG 1.6X0.8 R/TP	
		C575	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C576	0CH4270K412	CAPACITOR,CHIP[CERAMIC M/L TC	27PF 50V J NP0 1608 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C577	0CH1223K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.022UF 50V Z Y5V(F) 1508 R/TP	
		C581	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C582	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C583	0CH1105F942	CAPACITOR,FIXED CERAMIC(Temp.c	1000000PF 16V 80%,-20% Y5V(F)	
		C596	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C5A3	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C5A4	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C5A5	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C5G1	0CE1086C638	CAPACITOR,FIXED ELECTROLYTIC	1000000000 PF SMS,SG 6.3V M FM	
		C5K1	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C5L1	0CH1105F942	CAPACITOR,FIXED CERAMIC(Temp.c	1000000PF 16V 80%,-20% Y5V(F)	
		C5L2	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C5L3	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C5L6	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C5P1	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C5P2	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C5S1	0CH4430K416	CAPACITOR,FIXED CERAMIC(High d	43PF 50V J NP0 2012 R/TP	
		C5S3	0CH1223K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.022UF 50V Z Y5V(F) 1508 R/TP	
		C601	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C602	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C603	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C604	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C605	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C606	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C607	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.c	2.2UF 16V 80%,-20% Y5V(F) 3216	
		C608	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C609	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C610	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C612	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C613	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C614	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C615	0CH1225F944	CAPACITOR,FIXED CERAMIC(Temp.c	2.2UF 16V 80%,-20% Y5V(F) 3216	
		C616	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C617	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C618	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C619	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C620	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C621	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C622	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C623	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C624	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C625	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C626	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C627	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C629	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C630	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C631	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C632	0CH4180K412	CAPACITOR,CHIP[CERAMIC M/L TC	18P 50V J COG 1.6X0.8 R/TP	
		C633	0CH4330K412	CAPACITOR,CHIP[CERAMIC M/L TC	33P 50V J COG 1.6X0.8 R/TP	
		C634	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C635	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C636	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	
		C637	0CH1102K562	CAPACITOR,FIXED CERAMIC(Temp.c	1000PF 50V 10% X7R(X) 1608 R/T	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C638	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C639	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C640	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C641	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C642	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C643	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C644	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C645	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C646	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C647	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C648	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C649	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C650	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C651	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C652	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C653	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C654	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C657	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C658	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C659	0CH4221K412	CAPACITOR,CHIP[CERAMIC M/L TC	220P 50V J COG 1.6X0.8 R/TP	
		C661	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C662	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C663	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C664	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C665	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C666	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C667	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C668	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C669	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C670	0CH4270K412	CAPACITOR,CHIP[CERAMIC M/L TC	27PF 50V J NP0 1608 R/TP	
		C671	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C672	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C673	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C675	0CE2274C638	CAPACITOR,ELECTROLYTIC	220M SRA 6.3V M FM5 TP(5)	
		C676	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C677	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C678	0CH4470K412	CAPA,CHIP CERAMIC M/L T.C F/S	47P 50V J COG 1.6X0.8 R/TP	
		C679	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C680	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C681	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C682	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C684	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C685	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C686	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C687	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C689	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C690	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C691	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C702	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C703	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C704	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C706	0CH4330K412	CAPACITOR,CHIP[CERAMIC M/L TC	33P 50V J COG 1.6X0.8 R/TP	
		C707	0CH4680K412	CAPACITOR,FIXED CERAMIC(HIGH D	68PF 50V 5% NP0 1608 R/TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C709	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C710	0CE4754K638	CAPACITOR,FIXED ELECTROLYTIC	4.7UF SRA,SS 50V 20% FM5 TP 5	
		C712	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C713	0CH4560K412	CAPA,CHIP CERAMIC M/L T.C F/S	56P 50V J COG 1.6X0.8 R/TP	
		C714	0CH4560K412	CAPA,CHIP CERAMIC M/L T.C F/S	56P 50V J COG 1.6X0.8 R/TP	
		C715	0CH4050K012	CAPACITOR,FIXED CERAMIC(HIGH D	5PF 50V O.25 PF NP0 1608 R/TP	
		C716	0CH4100K412	CAPACITOR,CHIP[CERAMIC M/L TC	10PF 50V J NP0 1608 R/TP	
		C717	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C718	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C719	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C720	0CH1392K512	CAPACITOR,FIXED CERAMIC(Temp.c	3900PF 50V 10% B(5YP) 1608 R/T	
		C721	0CH1392K512	CAPACITOR,FIXED CERAMIC(Temp.c	3900PF 50V 10% B(5YP) 1608 R/T	
		C722	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C723	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C726	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C727	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C728	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C729	0CE3354K638	CAPACITOR,FIXED ELECTROLYTIC	3.3UF SRA,SS 50V 20% FM5 TP 5	
		C732	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C751	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C752	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C7M3	0CH4270K412	CAPACITOR,CHIP[CERAMIC M/L TC	27PF 50V J NP0 1608 R/TP	
		C7M5	0CH1105F942	CAPACITOR,FIXED CERAMIC(Temp.c	1000000PF 16V 80%,-20% Y5V(F)	
		C7M6	0CH4270K412	CAPACITOR,CHIP[CERAMIC M/L TC	27PF 50V J NP0 1608 R/TP	
		C7V1	0CE4764C638	CAPACITOR,ELECTROLYTIC	47M SRA 6.3V M FM5 TP(5)	
		C7V2	0CH1103K512	CAPA,CHIP CERAMIC M/L H.D F/S	0.0100UF 50V K B 1608 R/TP	
		C7V3	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C7V4	0CH1473H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.0470UF 25V Z Y5V(F) 1608 R/T	
		C7V5	0CH1473H942	CAPA,CHIP CERAMIC M/L H.D F/S	0.0470UF 25V Z Y5V(F) 1608 R/T	
		C802	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C803	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C804	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C805	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C806	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C807	0CE4744K638	CAPACITOR,ELECTROLYTIC	0.47M SRA 50V M FM5 TP(5)	
		C810	0CH1105F942	CAPACITOR,FIXED CERAMIC(Temp.c	1000000PF 16V 80%,-20% Y5V(F)	
		C811	0CH1105F942	CAPACITOR,FIXED CERAMIC(Temp.c	1000000PF 16V 80%,-20% Y5V(F)	
		C812	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C813	0CH1682K512	CAPACITOR,FIXED CERAMIC(Temp.c	6800PF 50V 10% B(5YP) 1608 R/T	
		C814	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C815	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C816	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C817	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C818	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C819	0CH1682K512	CAPACITOR,FIXED CERAMIC(Temp.c	6800PF 50V 10% B(5YP) 1608 R/T	
		C820	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C821	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C822	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C823	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C824	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C825	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C826	0CH1103K562	CAPACITOR,FIXED CERAMIC(Temp.c	0.01UF 50V 10% X7R(X) 1608 R/T	
		C828	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C829	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C855	0CH1105F942	CAPACITOR,FIXED CERAMIC(Temp.c	1000000PF 16V 80%,-20% Y5V(F)	
		C856	0CH1105F942	CAPACITOR,FIXED CERAMIC(Temp.c	1000000PF 16V 80%,-20% Y5V(F)	
		C857	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C859	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C860	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C861	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C862	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C863	0CE4764F638	CAPACITOR,ELECTROLYTIC	47M SRA/SS 16V M FM5 TP(5)	
		C864	0CE1054K638	CAPACITOR,ELECTROLYTIC	1.0M SRA/SS50V M FM5 TP(5)	
		C865	0CH4680K412	CAPACITOR,FIXED CERAMIC(HIGH D	68PF 50V 5% NP0 1608 R/TP	
		C867	0CE2264F638	CAPACITOR,FIXED ELECTROLYTIC	22UF SRA,SS 16V 20% FM5 TP 5	
		C869	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C870	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C871	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C884	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C885	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C886	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C887	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C888	0CE1064F638	CAPACITOR,ELECTROLYTIC	10M SRA 16V M FM5 TP(5)	
		C889	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C890	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C901	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C912	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C915	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C916	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C921	0CH1102K512	CAPACITOR,FIXED CERAMIC(TEMP.C	1000PF 50V 10% B(5YP) 1608 R/T	
		C931	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C932	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C933	0CE4775C638	CAPACITOR,FIXED ELECTROLYTIC	470UF SR,SV 6.3V 20% FM5 TP 5	
		C938	0CH1104K942	CAPACITOR,CHIP[CERAMIC M/L HD	0.1UF 50V Z Y5V(F) 1508 R/TP	
		C943	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C944	0CH4101K412	CHIP CAPA CERAMIC M/L T.C F/S	100P 50V J COG 1.6X0.8 R/TP	
		C945	0CQ3921N449	CAPACITOR,FIXED FILM	3900PF D 100V 5% PP TP5	
		C946	0CQ3921N449	CAPACITOR,FIXED FILM	3900PF D 100V 5% PP TP5	
		CS501	6600M000026	SWITCH,PUSH	MPU12970MLB0 VCR CST IN S/W MI	
		D111	0DR104009BA	DIODE,RECTIFIERS	RL104F TP RECTRON - 400V 1A 30	
		D114	0DR104009AB	DIODE,RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
		D117	0DR104009AB	DIODE,RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
		D118	0DR104009AB	DIODE,RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
		D121	0DD133009AA	DIODE,SWITCHING	1SS133 DETECT,SW TP	
		D122	0DR104009AB	DIODE,RECTIFIERS	RL104 R. TP GULF SEMICONDUCTOR	
		D301	0DD133009AA	DIODE,SWITCHING	1SS133 DETECT,SW TP	
		D401	0DSRM00118A	DIODE,SWITCHING	DAP202K T146 ROHM R/TP SMD 80V	
		D502	0DD133009AA	DIODE,SWITCHING	1SS133 DETECT,SW TP	
		D509	0DD133009AA	DIODE,SWITCHING	1SS133 DETECT,SW TP	
		D801	0DD133009AA	DIODE,SWITCHING	1SS133 DETECT,SW TP	
		D802	0DD133009AA	DIODE,SWITCHING	1SS133 DETECT,SW TP	
		ES501	4931R-0085C	HOLDER ASSEMBLY	VCR DECK/MECHA END(S)	
		ES502	4931R-0085C	HOLDER ASSEMBLY	VCR DECK/MECHA END(S)	
		F602	6200JB8010V	FILTER(CIRC),EMC	LFA20-2A1E473MT MITSUBISHI MAT	
		IC151	0IPMGJR007A	IC,POWER MANAGEMENT	NJM2396F08 JRC 4PIN TO-220 ST	
		IC151	0IPMGKE008B	IC,POWER MANAGEMENT	KIA78R08PI/API CU KEC 4P TO-22	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		IC151	0IPMGSH009A	IC,POWER MANAGEMENT	PQ08RD1L SHARP 4PIN TO-220 ST	
		IC151	0IPMGFA016A	IC,POWER MANAGEMENT	KA78R08TSTU FAIRCHILD 4P TO-22	
		IC152	0IPMGSH009A	IC,POWER MANAGEMENT	PQ08RD1L SHARP 4PIN TO-220 ST	
		IC152	0IPMGFA015A	IC,POWER MANAGEMENT	KA78R33TSTU FAIRCHILD 4P TO-22	
		IC152	0IPMGKE006B	IC,POWER MANAGEMENT	KIA78R33PI CU KEC 4P TO-220IS	
		IC201	0ILNRNF006C	IC,LINEAR	MT1336E/BP MEDIATEK INCORPORAT	
		IC202	0IPRPSA010A	IC,PERIPHERALS	LA6560-A-TE-L SANYO HSOP-36R R	
		IC301	0ILNRSA005B	IC,LINEAR	LA71750EM SANYO 100PIN QFP TRA	
		IC401	0IPRPCI002B	IC,PERIPHERALS	CS4392-KZR CIRRUS LOGIC 20 TSS	
		IC402	0IJR458000B	IC,JRC	NJM4580M 8,DMP8 TP OP AMP 2K/R	
		IC402	0ILNRUC001A	IC,LINEAR	MC4580 UTC 8PIN,SOP R/TP 2CH O	
		IC501	0IMCRHI035A	IC,MICRO CONTROLLER	HD6432197SA37F HITACHI 112PIN	
		IC503	0IAL241600B	IC,ATMEL	AT24C16 - - - -	
		IC503	0ICS241600B	IC,CATALYST	CAT24WC16P 8P DIP ST 16K SERIA	
		IC504	0IKE703100A	IC,KEC	KIA7031P 3P 3.1V RESET(TAPING)	
		IC504	0ISS753100A	IC,SAMSUNG ELECTRONICS	KA7531Z TO-92 TP 3.1V RESET	
		IC505	0IKE704200B	IC,KEC	KIA7042P 3P 4.2V RESET(TAPING)	
		IC5F1	0ILNRPY001A	IC,LINEAR	PT6955 PTC 24P SOP ST LED DRIV	
		IC601	0ILNRNF008C	IC,LINEAR	MT1379EEC/CA MEDIATEK INCORPOR	
		IC602	0IMMREB006A	IC,MEMORIES	M12L16161A-7T-TI ELITE MEMORY	
		IC602	0IMMRHY001A	IC,MEMORIES	HY57V161610DTC-7 HYUNDAI 50P T	
		IC602	0IMMREB006C	IC,MEMORIES	M12L16161A-7T ESMT 50PIN,TSOP	
		IC603	0IMMREB006A	IC,MEMORIES	M12L16161A-7T-TI ELITE MEMORY	
		IC603	0IMMREB006C	IC,MEMORIES	M12L16161A-7T ESMT 50PIN,TSOP	
		IC603	0IMMRHY001A	IC,MEMORIES	HY57V161610DTC-7 HYUNDAI 50P T	
		IC604	0ISS240210A	IC,SAMSUNG ELECTRONICS	S524A40X21-SCT0 SOP8 TP EEPROM	
		IC606	0IFA742440F	IC,FAIRCHILD	MM74HCT244SJ 20P SOIC TP 3-STA	
		IC6A1A	6957R-601AP	PROGRAM		
		IC6A2	0IPRPMT008A	IC,PERIPHERALS	MM1623XFBE MITSUMI 28PIN SOP R	
		IC751	0IIT341700C	IC,ITT	MSP3417G-QG-B8-V3 44 QFP TRAY	
		IC7V1	0ILNRMN001B	IC,LINEAR	SDA5650X GEG MICRONAS 20PIN SO	
		IC801	0IPH960500A	IC,PHILIPS	TDA9605H QFP44 BK HIFI AMP+HIF	
		IC802	0IPRPMT009A	IC,PERIPHERALS	MM1443XJBE MITSUMI 34PIN SSOP	
		J701	0RH1501C622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 16 W 1608 5.00% D	
		J702	0RH1501C622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 16 W 1608 5.00% D	
		J902	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		J903	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		J904	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		J905	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		J912	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		J913	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		JK5L1	6612J00053A	JACK,RCA	DPAE-0385 DOOWON RGB 2004 CO	
		JK902	6612J00050B	JACK,RCA	RCA-901A-02-1 YUQIU 2004 COMBI	
		L111	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L122	633-088G	COIL,CHOKE	22MH TOKO 5MM TP	
		L122	6140R-C011A	COIL,RF	CHOKE COIL TDK 22UH(=633-088G	
		L123	633-088G	COIL,CHOKE	22MH TOKO 5MM TP	
		L123	6140R-C011A	COIL,RF	CHOKE COIL TDK 22UH(=633-088G	
		L201	0LR0102J025	INDUCTOR,RADIAL LEAD	10UH 5% 4X5 TR5	
		L202	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L203	0LR0102J025	INDUCTOR,RADIAL LEAD	10UH 5% 4X5 TR5	
		L204	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L231	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		L251	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L261	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L262	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L264	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L265	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L301	0LR0102J0N5	INDUCTOR,RADIAL LEAD	10UH 5% TP 3X5 TR5	
		L301	GLR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L301	0LR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L303	0LR0102J0N5	INDUCTOR,RADIAL LEAD	10UH 5% TP 3X5 TR5	
		L303	GLR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L303	0LR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L304	0LR0102J0N5	INDUCTOR,RADIAL LEAD	10UH 5% TP 3X5 TR5	
		L304	0LR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L304	GLR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L305	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L306	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L307	0LR0102J0N5	INDUCTOR,RADIAL LEAD	10UH 5% TP 3X5 TR5	
		L307	0LR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L307	GLR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L308	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L501	0LA0122K018	INDUCTOR AXIAL LEAD	12M K 2.3X3.4 L5 TP	
		L503	0LR1000J0N5	INDUCTOR,RADIAL LEAD	100UH 5% TP 3X5 TR5	
		L504	0LR0102J0N5	INDUCTOR,RADIAL LEAD	10UH 5% TP 3X5 TR5	
		L504	0LR0102K0P5	INDUCTOR,RADIAL LEAD	LF7.5N OEL 10UH 10% TP 4.8X4.0	
		L505	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L506	635-027C	INDUCTOR,RADIAL LEAD	EL0405RA SKI150G-3 K-TDK 15UH	
		L5F1	0LR1000J0N5	INDUCTOR,RADIAL LEAD	100UH 5% TP 3X5 TR5	
		L5F2	0LR1000J0N5	INDUCTOR,RADIAL LEAD	100UH 5% TP 3X5 TR5	
		L5G1	0LR4700K035	INDUCTOR RADIAL LEAD	470M K 6X6 L5 TP	
		L5S1	0LA0332K018	INDUCTOR AXIAL LEAD	33M K 2.3X3.4 L5 TP	
		L601	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L602	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L603	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L604	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L605	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L606	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L608	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L701	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L702	0LR0102K035	INDUCTOR RADIAL LEAD	10M K 6X6 L5 TP	
		L704	0LR0102K035	INDUCTOR RADIAL LEAD	10M K 6X6 L5 TP	
		L705	0LR0102K035	INDUCTOR RADIAL LEAD	10M K 6X6 L5 TP	
		L7V1	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L801	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L803	0LR1000K035	INDUCTOR RADIAL LEAD	100M K 6X6 L5 TP	
		L901	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L902	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L903	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L904	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L905	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L906	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L907	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L908	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L909	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		L910	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L911	0LCCE00004L	INDUCTOR,CHIP	1UH , CHIP2012 CERATECH R/TP	
		L912	0LCCE00004L	INDUCTOR,CHIP	1UH , CHIP2012 CERATECH R/TP	
		L913	0LCCE00004L	INDUCTOR,CHIP	1UH , CHIP2012 CERATECH R/TP	
		L916	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L917	0LCCE00004E	INDUCTOR,CHIP	FI-C2012-103KJT (10UH) CERATEC	
		L920	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L921	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		L922	6200HJC102A	FILTER(CIRC),EMC	HB-1M2012-102JT CERATECH TP	
		LD501	4931R-0089C	HOLDER ASSEMBLY	VCR DECK/MECHA END(S)	
		LED501	6301R2U011A	LED ASSEMBLY	TOS-366AGMGMRMY-B OASIS UNIVER	
		MS501	6600JR3002D	SWITCH,MODE	SSS-51MD-3 SHINMEI 5VDC 1MA D3	
		MS501	6600JR3002E	SWITCH,MODE	MMS01080ZMBO MIC 5VDC 1MA D37	
		Q150	0TRAU90024A	TRANSISTOR,BIPOLARS	STA353 AUK KOREA TP MPAK -40V	
		Q153	0TR928009AD	TRANSISTOR	KSA928A-Y,TO-92L TP SAMSUNG TO	
		Q153	0TR127709AB	TRANSISTOR,BIPOLARS	AUK KOREA STB1277LY-AT TP TO-9	
		Q153	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q154	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q156	0TR320509AB	TRANSISTOR	KTC3205-TP-Y (KTC2236A)KEC	
		Q161	0TR126809BA	TRANSISTOR,BIPOLARS	KTA1268-BL TP KEC	
		Q162	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q163	0TR928009AD	TRANSISTOR	KSA928A-Y,TO-92L TP SAMSUNG TO	
		Q163	0TR127709AB	TRANSISTOR,BIPOLARS	AUK KOREA STB1277LY-AT TP TO-9	
		Q163	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q164	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q173	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q201	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q202	0TRRH80042A	TRANSISTOR,BIPOLARS	2SK3018 T106 ROHM KOREA R/TP U	
		Q203	0TRRH80042A	TRANSISTOR,BIPOLARS	2SK3018 T106 ROHM KOREA R/TP U	
		Q204	0TR103709BB	TRANSISTOR,BIPOLARS	2SA1037K-Q CHIP TP ROHM - -	
		Q205	0TR103709BB	TRANSISTOR,BIPOLARS	2SA1037K-Q CHIP TP ROHM - -	
		Q301	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q302	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q303	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q304	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q305	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q306	0TR534409AA	TRANSISTOR	2SC5344Y TP	
		Q306	0TR320309AA	TRANSISTOR,BIPOLARS	KTC3203 KEC TP TO92 50V 150MA	
		Q309	0TR150409AC	TRANSISTOR	KTA1504-GR-T1(ASG) CHIP KEC	
		Q311	0TR319909AA	TRANSISTOR	KTC3199-GR (2SC3199) TP KEC TO	
		Q401	0TR103709BB	TRANSISTOR,BIPOLARS	2SA1037K-Q CHIP TP ROHM - -	
		Q404	0TR103009AC	TRANSISTOR	KRA103S-T1(PC)22-22 CHIP KEC	
		Q405	0TR103009AC	TRANSISTOR	KRA103S-T1(PC)22-22 CHIP KEC	
		Q501	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q502	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q503	0TR928009AD	TRANSISTOR	KSA928A-Y,TO-92L TP SAMSUNG TO	
		Q503	0TR127709AB	TRANSISTOR,BIPOLARS	AUK KOREA STB1277LY-AT TP TO-9	
		Q503	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q504	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q514	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q515	0TR103009AA	TRANSISTOR	CHIP KRC103S-T1(NC)22-22 KEC	
		Q5S1	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q601	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		Q801	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q802	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q803	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q901	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q902	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		Q903	0TR387509AC	TRANSISTOR	CHIP KTC3875S-GR-T1(ALG) KEC	
		R110	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R150	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R151	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R152	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R153	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R154	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R155	0RH3902C622	RESISTOR,METAL GLAZED(CHIP)	39K OHM 1 / 16 W 1608 5.00% D	
		R156	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R157	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R158	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R159	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R160	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R161	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R162	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R164	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R170	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R172	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R173	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R174	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R175	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R176	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R177	0RH3902C622	RESISTOR,METAL GLAZED(CHIP)	39K OHM 1 / 16 W 1608 5.00% D	
		R181	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R182	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R201	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R202	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R203	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R204	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R205	0RH0272C622	RESISTOR,METAL GLAZED(CHIP)	27 OHM 1 / 16 W 1608 5.00% D	
		R206	0RH0272C622	RESISTOR,METAL GLAZED(CHIP)	27 OHM 1 / 16 W 1608 5.00% D	
		R207	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R208	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R209	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R210	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R211	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R212	0RJ7503C677	RESISTOR,METAL GLAZED(CHIP)	750K OHM 1/16 W 5% 1608 R/TP	
		R213	0RH3903C622	RESISTOR,METAL GLAZED(CHIP)	390K OHM 1 / 16 W 1608 5.00% D	
		R214	0RJ7503C677	RESISTOR,METAL GLAZED(CHIP)	750K OHM 1/16 W 5% 1608 R/TP	
		R215	0RH3903C622	RESISTOR,METAL GLAZED(CHIP)	390K OHM 1 / 16 W 1608 5.00% D	
		R216	0RH0201D622	RESISTOR,METAL GLAZED(CHIP)	2 OHM 1 / 10 W 2012 5.00% D	
		R217	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R218	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R220	0RH0272C622	RESISTOR,METAL GLAZED(CHIP)	27 OHM 1 / 16 W 1608 5.00% D	
		R221	0RH0272C622	RESISTOR,METAL GLAZED(CHIP)	27 OHM 1 / 16 W 1608 5.00% D	
		R223	0RH0201D622	RESISTOR,METAL GLAZED(CHIP)	2 OHM 1 / 10 W 2012 5.00% D	
		R231	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R232	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R233	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R234	0RH0221C622	RESISTOR,METAL GLAZED(CHIP)	2.2 OHM 1 / 16 W 1608 5.00% D	
		R235	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R236	0RH1502C622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 16 W 1608 5.00% D	
		R237	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R238	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R239	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R240	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R241	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R242	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R243	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R244	0RH1502C622	RESISTOR,METAL GLAZED(CHIP)	15K OHM 1 / 16 W 1608 5.00% D	
		R245	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R246	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R251	0RH3302C622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 16 W 1608 5.00% D	
		R252	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R253	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R254	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R255	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R256	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R257	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R258	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R259	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R280	0LCCE00030A	INDUCTOR,CHIP	HB-1T1608-301JT CERATECH R/TP	
		R281	0LCCE00029A	INDUCTOR,CHIP	HB-1T1608-121JT CERATECH R/TP	
		R282	0LCCE00029A	INDUCTOR,CHIP	HB-1T1608-121JT CERATECH R/TP	
		R301	0RH5602C622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 16 W 1608 5.00% D	
		R302	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R303	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R304	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R305	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R306	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R307	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R308	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R309	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R310	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R311	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R312	0RH6802C622	RESISTOR,METAL GLAZED(CHIP)	68K OHM 1 / 16 W 1608 5.00% D	
		R313	0RH1800C622	RESISTOR,METAL GLAZED(CHIP)	180 OHM 1 / 16 W 1608 5.00% D	
		R314	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R315	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R316	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R317	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R318	0RH3901C622	RESISTOR,METAL GLAZED(CHIP)	3.9K OHM 1 / 16 W 1608 5.00% D	
		R319	0RH5600C622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 16 W 1608 5.00% D	
		R320	0RH1800C622	RESISTOR,METAL GLAZED(CHIP)	180 OHM 1 / 16 W 1608 5.00% D	
		R321	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R322	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R324	0RH3303C622	RESISTOR,METAL GLAZED(CHIP)	330K OHM 1 / 16 W 1608 5.00% D	
		R325	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R326	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R327	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R328	0RH2700C622	RESISTOR,METAL GLAZED(CHIP)	270 OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R329	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R330	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R331	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R332	0RH4702C622	RESISTOR,METAL GLAZED(CHIP)	47K OHM 1 / 16 W 1608 5.00% D	
		R333	0RH3901C622	RESISTOR,METAL GLAZED(CHIP)	3.9K OHM 1 / 16 W 1608 5.00% D	
		R334	0RH2701C622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 16 W 1608 5.00% D	
		R335	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R336	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R337	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R338	0RH2700C622	RESISTOR,METAL GLAZED(CHIP)	270 OHM 1 / 16 W 1608 5.00% D	
		R339	0RH2700C622	RESISTOR,METAL GLAZED(CHIP)	270 OHM 1 / 16 W 1608 5.00% D	
		R340	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R342	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R343	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R345	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R346	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R347	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R348	0RH1504C622	RESISTOR,METAL GLAZED(CHIP)	1.5M OHM 1 / 16 W 1608 5.00% D	
		R349	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R350	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R351	0RH8203C622	RESISTOR,METAL GLAZED(CHIP)	820K OHM 1 / 16 W 1608 5.00% D	
		R352	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R353	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R356	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R365	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R366	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R367	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R368	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R375	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R401	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R402	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R403	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R404	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R405	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R407	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R408	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R409	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R410	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R411	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R412	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R413	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R414	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R415	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R416	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R417	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R418	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R419	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R420	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R421	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R422	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R423	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R424	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R425	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R426	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R427	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R501	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R502	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R503	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R504	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R505	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R506	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R508	0RH3301C622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 16 W 1608 5.00% D	
		R509	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R510	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R511	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R512	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R513	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R514	0RH1203C622	RESISTOR,METAL GLAZED(CHIP)	120K OHM 1 / 16 W 1608 5.00% D	
		R515	0RH2700C622	RESISTOR,METAL GLAZED(CHIP)	270 OHM 1 / 16 W 1608 5.00% D	
		R516	0RH4703C622	RESISTOR,METAL GLAZED(CHIP)	470K OHM 1 / 16 W 1608 5.00% D	
		R517	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R518	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R519	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R520	0RH3901C622	RESISTOR,METAL GLAZED(CHIP)	3.9K OHM 1 / 16 W 1608 5.00% D	
		R521	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R522	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R523	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R524	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R525	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R526	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R527	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R528	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R529	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R530	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R531	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R535	0RH4703C622	RESISTOR,METAL GLAZED(CHIP)	470K OHM 1 / 16 W 1608 5.00% D	
		R536	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R537	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R538	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R539	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R542	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R543	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R544	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R545	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R546	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R547	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R548	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R550	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R553	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R554	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R555	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R556	0RH2202C622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 16 W 1608 5.00% D	
		R557	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R558	0RH2202C622	RESISTOR,METAL GLAZED(CHIP)	22K OHM 1 / 16 W 1608 5.00% D	
		R559	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R560	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R561	0RH5600C622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 16 W 1608 5.00% D	
		R562	0RH5600C622	RESISTOR,METAL GLAZED(CHIP)	560 OHM 1 / 16 W 1608 5.00% D	
		R563	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R564	0RH2702C622	RESISTOR,METAL GLAZED(CHIP)	27K OHM 1 / 16 W 1608 5.00% D	
		R566	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R567	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R568	0RH6802C622	RESISTOR,METAL GLAZED(CHIP)	68K OHM 1 / 16 W 1608 5.00% D	
		R569	0RH1004C622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 16 W 1608 5.00% D	
		R570	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R575	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R576	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R577	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R578	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R579	0RH5602C622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 16 W 1608 5.00% D	
		R582	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R583	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R589	0RH1004C622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 16 W 1608 5.00% D	
		R591	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R5A2	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R5A3	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R5A5	0RH4703C622	RESISTOR,METAL GLAZED(CHIP)	470K OHM 1 / 16 W 1608 5.00% D	
		R5B3	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R5B4	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R5B5	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R5C1	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R5C5	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R5C6	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R5C7	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R5C9	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R5G1	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R5G2	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R5J2	0RH1501C622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 16 W 1608 5.00% D	
		R5J3	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R5J4	0RH1501C622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 16 W 1608 5.00% D	
		R5J5	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R5J6	0RH3301C622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 16 W 1608 5.00% D	
		R5J7	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R5J8	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	
		R5K1	0RH6800C622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 16 W 1608 5.00% D	
		R5K2	0RH8200C622	RESISTOR,METAL GLAZED(CHIP)	820 OHM 1 / 16 W 1608 5.00% D	
		R5K3	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R5K4	0RH1501C622	RESISTOR,METAL GLAZED(CHIP)	1.5K OHM 1 / 16 W 1608 5.00% D	
		R5K5	0RH5602C622	RESISTOR,METAL GLAZED(CHIP)	56K OHM 1 / 16 W 1608 5.00% D	
		R5K6	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R5K7	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R5K8	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R5K9	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R5P2	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R5P3	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R5R8	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R5S1	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R5S2	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R601	0RH8201C622	RESISTOR,METAL GLAZED(CHIP)	8.2K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R602	0RJ7503C677	RESISTOR,METAL GLAZED(CHIP)	750K OHM 1/16 W 5% 1608 R/TP	
		R603	0RH0471C622	RESISTOR,METAL GLAZED(CHIP)	4.7 OHM 1 / 16 W 1608 5.00% D	
		R604	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R605	0RH0471C622	RESISTOR,METAL GLAZED(CHIP)	4.7 OHM 1 / 16 W 1608 5.00% D	
		R606	0RH0471C622	RESISTOR,METAL GLAZED(CHIP)	4.7 OHM 1 / 16 W 1608 5.00% D	
		R607	0RH1801C622	RESISTOR,METAL GLAZED(CHIP)	1.8K OHM 1 / 16 W 1608 5.00% D	
		R608	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R609	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R610	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R611	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R612	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R613	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R615	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R616	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R617	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R618	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R619	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R620	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R621	0LCCE00031A	INDUCTOR,CHIP	HB-1T1608-300JT CERATECH R/TP	
		R622	0RH0332C622	RESISTOR,METAL GLAZED(CHIP)	33 OHM 1 / 16 W 1608 5.00% D	
		R623	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R624	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R625	0RH1201C622	RESISTOR,METAL GLAZED(CHIP)	1.2K OHM 1 / 16 W 1608 5.00% D	
		R626	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R627	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R628	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R629	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R630	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R631	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R634	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R635	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R636	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R637	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R640	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R642	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R643	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R644	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R645	0RH3300C622	RESISTOR,METAL GLAZED(CHIP)	330 OHM 1 / 16 W 1608 5.00% D	
		R646	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R647	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R648	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R651	0RH0222C622	RESISTOR,METAL GLAZED(CHIP)	22 OHM 1 / 16 W 1608 5.00% D	
		R652	0RH1100C622	RESISTOR,METAL GLAZED(CHIP)	110 OHM 1 / 16 W 1608 5.00% D	
		R653	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R654	0RH1100C622	RESISTOR,METAL GLAZED(CHIP)	110 OHM 1 / 16 W 1608 5.00% D	
		R655	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R656	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R657	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R659	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R660	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R661	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R662	0RH1500C422	RESISTOR,METAL GLAZED(CHIP)	150 OHM 1 / 16 W 1608 1.00% D	
		R665	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R667	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R680	0LCCE00029A	INDUCTOR,CHIP	HB-1T1608-121JT CERATECH R/TP	
		R681	0LCCE00029A	INDUCTOR,CHIP	HB-1T1608-121JT CERATECH R/TP	
		R682	0LCCE00030A	INDUCTOR,CHIP	HB-1T1608-301JT CERATECH R/TP	
		R705	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R706	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R707	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R710	0RH3301C622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 16 W 1608 5.00% D	
		R711	0RH3301C622	RESISTOR,METAL GLAZED(CHIP)	3.3K OHM 1 / 16 W 1608 5.00% D	
		R712	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R713	0RH5601C622	RESISTOR,METAL GLAZED(CHIP)	5.6K OHM 1 / 16 W 1608 5.00% D	
		R715	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R716	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R717	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R718	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R7M1	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7M2	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R7M4	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R7M5	0RH2200C622	RESISTOR,METAL GLAZED(CHIP)	220 OHM 1 / 16 W 1608 5.00% D	
		R7V1	0RH1004C622	RESISTOR,METAL GLAZED(CHIP)	1M OHM 1 / 16 W 1608 5.00% D	
		R7V2	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R7V3	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R7V4	0RH5603C622	RESISTOR,METAL GLAZED(CHIP)	560K OHM 1 / 16 W 1608 5.00% D	
		R7V5	0RH6801C622	RESISTOR,METAL GLAZED(CHIP)	6.8K OHM 1 / 16 W 1608 5.00% D	
		R7V6	0RH5603C622	RESISTOR,METAL GLAZED(CHIP)	560K OHM 1 / 16 W 1608 5.00% D	
		R7V7	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R7V8	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R7V9	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R801	0RH3304C622	RESISTOR,METAL GLAZED(CHIP)	3.3M OHM 1 / 16 W 1608 5.00% D	
		R802	0RH3302C622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 16 W 1608 5.00% D	
		R803	0RH2701C622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 16 W 1608 5.00% D	
		R804	0RH3902C622	RESISTOR,METAL GLAZED(CHIP)	39K OHM 1 / 16 W 1608 5.00% D	
		R805	0RH2701C622	RESISTOR,METAL GLAZED(CHIP)	2.7K OHM 1 / 16 W 1608 5.00% D	
		R806	0RH3302C622	RESISTOR,METAL GLAZED(CHIP)	33K OHM 1 / 16 W 1608 5.00% D	
		R807	0RH4700C622	RESISTOR,METAL GLAZED(CHIP)	470 OHM 1 / 16 W 1608 5.00% D	
		R808	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R809	0RH1802C622	RESISTOR,METAL GLAZED(CHIP)	18K OHM 1 / 16 W 1608 5.00% D	
		R810	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R811	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R812	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R821	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R822	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R823	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R824	0RH1003C622	RESISTOR,METAL GLAZED(CHIP)	100K OHM 1 / 16 W 1608 5.00% D	
		R825	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R826	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R850	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R851	0RH1000C622	RESISTOR,METAL GLAZED(CHIP)	100 OHM 1 / 16 W 1608 5.00% D	
		R861	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R862	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R863	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R864	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R865	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		R866	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R867	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R868	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R874	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R875	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R876	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R881	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R882	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R891	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R892	0RH4701C622	RESISTOR,METAL GLAZED(CHIP)	4.7K OHM 1 / 16 W 1608 5.00% D	
		R901	0RH1202C622	RESISTOR,METAL GLAZED(CHIP)	12K OHM 1 / 16 W 1608 5.00% D	
		R902	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R903	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R904	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R905	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R906	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R907	0RH2201C622	RESISTOR,METAL GLAZED(CHIP)	2.2K OHM 1 / 16 W 1608 5.00% D	
		R908	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R909	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R910	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R911	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R912	0RH0000C622	RESISTOR,METAL GLAZED(CHIP)	0 OHM 1 / 16 W 1608 5.00% D	
		R913	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R914	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R919	0RH1002C622	RESISTOR,METAL GLAZED(CHIP)	10K OHM 1 / 16 W 1608 5.00% D	
		R920	0RH6800C622	RESISTOR,METAL GLAZED(CHIP)	680 OHM 1 / 16 W 1608 5.00% D	
		R927	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R930	0RH1001C622	RESISTOR,METAL GLAZED(CHIP)	1K OHM 1 / 16 W 1608 5.00% D	
		R933	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R941	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R942	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R943	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		R944	0RH0752C622	RESISTOR,METAL GLAZED(CHIP)	75 OHM 1 / 16 W 1608 5.00% D	
		RC501	6712R1938EA	REMOTE CONTROLLER RECEIVER	TSOP2238AY VISHAY 38KHZ LGEDI	
		RS501	6500RAB008A	SENSOR	KIT-3001A REEL SENSOR KODENSHI	
		RS502	6500RAB008A	SENSOR	KIT-3001A REEL SENSOR KODENSHI	
		SC901	6612M00006A	JACK,SCART	DSAM-0341 DOOWON	
		SW501	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW501	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW501	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW502	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW502	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW502	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW503	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW503	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW503	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW504	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW504	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW504	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW505	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW505	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW505	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW506	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		SW506	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW506	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW507	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW507	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW507	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW508	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW508	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW508	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW509	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW509	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW509	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW510	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW510	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW510	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW511	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW511	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW511	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW512	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW512	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW512	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW513	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW513	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		SW513	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW514	556-213C	SWITCH,DETECTOR	THVV951BAA POSTECH DC 12 V 5-0	
		SW514	6600RRT001R	SWITCH,TACT	SKHVBG3910-AA FORWARD 12V DC 5	
		SW514	6600RRT001G	SWITCH,TACT	EVQ 213 09K MATSUSHITA 15V DC	
		TU701	6700PFPL07F	TUNER	TADM-M101D(GKI,LGIT) LG INOTEK	
		TU701	6700PFPG05F	TUNER	TCMK0601PD20C(GKI,SS) SS PAL F	
		X301	6212AA2443Z	RESONATOR,CRYSTAL	HC-49S CSC/KITELCO 4.433619MHZ	
		X501	6212AA2100C	RESONATOR,CRYSTAL	HC-49S BUBANG 10MHZ +/- 30 PPM	
		X501	6202R31001F	RESONATOR,CRYSTAL	HC-49S KEUMSEOK 10-0000MHZ 30P	
		X502	6202R-DA01B	RESONATOR,CRYSTAL	CFS-308 CITIZEN 32.768KHZ +/-	
		X502	6212AC2327E	RESONATOR,CRYSTAL	C-001R SEIKO EPSON 32.768 KHZ	
		X601	6202R-BL06C	RESONATOR,CRYSTAL	HC-49/S BUBANG 27MHZ 20PPM 15	
		X751	529-021Q	RESONATOR,CRYSTAL	49U BUBANG 18432000HZ 30PPM 16	
		X751	6212AA2184F	RESONATOR,CRYSTAL	HC-49U KYUNGIL 18.432MHZ +/- 3	
		ZD103	0DZ132609BB	DIODE,ZENER	UZ-13BSA 26MM TP PYUNG CHANG	
		ZD501	0DZ562609BB	DIODE,ZENER	UZ-5.6BSB 26MM TP PYUNG CHANG	
		ZD502	0DZ562609BB	DIODE,ZENER	UZ-5.6BSB 26MM TP PYUNG CHANG	
		ZD503	0DZ562609BB	DIODE,ZENER	UZ-5.6BSB 26MM TP PYUNG CHANG	
		ZD504	0DZ562609BB	DIODE,ZENER	UZ-5.6BSB 26MM TP PYUNG CHANG	
		ZD505	0DZKE00018A	DIODE,ZENERS	Z02W7.5V KEC R/TP SOT23 250MW	
		ZD506	0DZKE00018A	DIODE,ZENERS	Z02W7.5V KEC R/TP SOT23 250MW	
		ZD507	0DZ562609BB	DIODE,ZENER	UZ-5.6BSB 26MM TP PYUNG CHANG	
		ZD508	0DZ562609BB	DIODE,ZENER	UZ-5.6BSB 26MM TP PYUNG CHANG	
		ZD601	0DZ562609BB	DIODE,ZENER	UZ-5.6BSB 26MM TP PYUNG CHANG	
		ZD801	0DZKE00018A	DIODE,ZENERS	Z02W7.5V KEC R/TP SOT23 250MW	
		ZD802	0DZKE00018A	DIODE,ZENERS	Z02W7.5V KEC R/TP SOT23 250MW	
		A47	**6871R-5377A**	**PWB(PCB) ASSEMBLY,TOTAL**	**SMPS VC8806P1K SERIES (DI)**	
		BD101	0DD160000DA	DIODE,RECTIFIERS	S1WBA60 BK SHINDENGEN - 600V -	
⚠		C101	624-088L	CAPACITOR,DRAWING	435D SUNIL ELECTRONICS 0.1UF/2	
⚠		C102	624-088L	CAPACITOR,DRAWING	435D SUNIL ELECTRONICS 0.1UF/2	
		C103	624-082C	CAPACITOR,AL.ELECTROLYTIC	100MF/400V SHL SMPS S/Y	

S	AL	LOCA. NO.	LG PART NO.	DESCRIPTION	SPECIFICATION	REMARKS
		C104	0CN1040K948	CAPACITOR,FIXED TUBULAR(HIGH D	0.1UF D 50V 80%,-20% F(Y5V) TA	
		C105	0CQ1031Y519	CAPACITOR,FIXED FILM	0.01UF D 630V 10% PE NI TP5	
		C106	624-087G	CAPACITOR	HIGH-VOL 68PF/1KV SMPS SAMHWA	
		C109	0CE1064K638	CAPACITOR,FIXED ELECTROLYTIC	10M SRA 50V M FM5 TP(5)	
⚠		C110	0CG1020U630	CAPACITOR,SEMI CERAMIC	1000PF 400V M E(Z5U) R	
⚠		C111	0CG2220U630	CAPACITOR,SEMI CERAMIC	2200 PF 400V M E R (NK,AD,SD)	
		C117	0CE337EK630	CAPACITOR,AL.ELECTROLYTIC	330UF KMG 50V M FM5 BULK	
		C123	0CE477BH630	CAPACITOR,AL.ELECTROLYTIC	470UF KME TYPE 25V M FM5 BULK	
		C127	0CE108BF630	CAPACITOR,FIXED ELECTROLYTIC	1000UF KME 16V M FM5 BULK	
		C129	0CE2282F611	CAPACITOR,FIXED ELECTROLYTIC	2200UF KMF 16V 20% BK7.5 FL	
		C131	624-082H	CAPACITOR	CE 1000UF/10V SHL(10*12.5)T/P	
		C132	624-085D	CAPACITOR	CE 47UF/50V KME (SMPS)	
		C133	0CQ1042K409	CAPACITOR,FIXED FILM	0.1UF S 50V 5% PE TP5	
		C135	0CN223AK948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 50V Z F TA26 S	
		C163	624-087D	CAPACITOR	HI-VOL 470P/1KVDC SMPS SAMHWA	
		D101	0DD221009AA	DIODE,RECTIFIERS	ERA22-10 KFLB,TP ,R T/P,FUJI	
		D102	0DD010009AC	DIODE,RECTIFIERS	EU01W(R-FORM) TP SANKEN	
		D106	0DD010009AC	DIODE,RECTIFIERS	EU01W(R-FORM) TP SANKEN	
		D110	0DR302000AB	DIODE,RECTIFIERS	HER302 BK RECTRON DO201AD 100V	
		D110	0DD400000AD	DIODE,RECTIFIERS	RU4YX BK SANKEN - - - - - -	
		D111	0DR158220AA	DIODE,RECTIFIERS	1N5822 BK RECTRON DO201AD 40V	
		D113	0DR104009BA	DIODE,RECTIFIERS	RL104F TP RECTRON - 400V 1A 30	
		D118	0DR104510AA	DIODE,RECTIFIERS	B10A45V1 BK KEC TO220 45V 10A	
⚠		F101	0FS1601B51D	FUSE,SLOW BLOW	1600MA 250 V 5.2X20 CY/GL KS/J	
		FH01	586-008B	HOLDER	FUSE CLIP TP SINSUNG	
		FH02	586-008B	HOLDER	FUSE CLIP TP SINSUNG	
⚠		IC101	0IPMGFA053A	IC,POWER MANAGEMENT	FSDL0365RN FAIRCHILD 8PIN,DIP	
⚠		IC102	657-063A	SENSOR	LTV-817B,PHOTO COUPLER(LITEON)	
		IC103	0IKE431000A	IC,KEC	KIA431 3 PIN TP	
⚠		L102	616-145G	FILTER(CIRC),DRAWING	SHT LFSQ2215V4-04220	
⚠		L102	616-145E	FILTER(CIRC),DRAWING	KSE-145E KSE LINE FILTER SQ211	
		L125	633-088D	COIL,CHOKE	20UH KWANGSUNG LEAD CUT	
		R100	0RD1504H632	RESISTOR,FIXED CARBON FILM	1.5M OHM 1/2 W 5.00% MF10	
		R101	614-007A	RESISTOR	2.7/2W CEMENT SMPS V	
		R104	0RS5602K619	RESISTOR,FIXED METAL OXIDE FIL	56K OHM 2 W 5.00% TR	
		R105	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 OHM 1/6 W 5% TA26	
		R112	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 OHM 1/6 W 5% TA26	
		R113	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K OHM 1/6 W 5% TA26	
		R114	0RD1001F608	RESISTOR,FIXED CARBON FILM	1K OHM 1/6 W 5% TA26	
		R115	0RN3301F408	RESISTOR,FIXED METAL FILM	3.3K OHM 1/6 W 1% TA26	
		R116	0RN2701F408	RESISTOR,FIXED METAL FILM	2.7K OHM 1/6 W 1% TA26	
		R117	0RD2700F608	RESISTOR,FIXED CARBON FILM	270 OHM 1/6 W 5% TA26	
		R119	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K OHM 1/6 W 5% TA26	
		R130	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K OHM 1/6 W 5% TA26	
⚠		T101	6170RNGW12G	TRANSFORMER,SMPS[COIL]	EER2828 SAMWHA 2004 COMBI CLO	
⚠		V101	656-004C	VARISTOR,DRAWING	SVC681D-10A SAMHWA 4.O CUT	